

# **STAR TRAC 4500 TREADMILL**

---

## **OWNER'S MANUAL**

P/N: 620-1122  
Revision D



**STAR**  
—  
**TRAC**  
®

# **STAR TRAC 4500 TREADMILL OWNER'S MANUAL**

**Star Trac's Service Hotline, 6 a.m. to 6 p.m. Pacific Standard Time**

**(800)-503-1221, or call**

**International Product Support in U.S.A.**

**(714)-669-1660**

Copyright 1998, Star Trac by Uniscon, Inc. All rights reserved, including those to reproduce this book or parts thereof in any form without first obtaining written permission from Star Trac.

Every effort has been made to keep the information current; however, periodically, changes are made to the information herein, and these changes will be incorporated into new editions of this publication. All product names and logos are trademarks of their respective owners. Printed in the USA.



## **TABLE OF CONTENTS**

<b>Introduction .....</b>	<b>1</b>
<b>Chapter 1: Safety Instructions .....</b>	<b>3</b>
<b>Chapter 2: Assembly and Setup .....</b>	<b>21</b>
Parts List .....	21
Assembly and Setup .....	22
<b>Chapter 3: Operating Instructions.....</b>	<b>27</b>
Display Control Panel Features .....	27
Hints and Tips for Getting Started .....	29
Manual Operation .....	29
Quick Start .....	30
Manual Program .....	31
Pre-Set Programs .....	32
5K Lake Loop and 10K Bay Run Race Programs .....	33
Mystery Hike .....	34
Custom Program .....	35
Dynamic Heart Rate Control .....	36
Heart Rate Monitoring .....	38
Manual Heart Rate Monitoring .....	38
Contact Heart Rate Monitoring .....	39
Polar Heart Rate Monitoring .....	39
FitLinxx ID Entry and Operation .....	40
<b>Chapter 4: Personal Trainer Studio .....</b>	<b>41</b>
Using Personal Trainer Studio .....	41
Fitness Testing .....	42
Entering New PIN Numbers .....	43

***Chapter 5: Training Information ..... 45***

The First Step to a Better Lifestyle .....	45
Getting Started - Walkers and Runners .....	45
Climbing Up the Conditioning Ladder .....	48
Program Variation on the TR4500 Treadmill .....	50
Tips to Stay Motivated .....	52

***Chapter 6: Preventive Maintenance ..... 53***

Daily Maintenance .....	53
Weekly Maintenance .....	53
Bi-weekly Maintenance .....	54
Monthly Maintenance .....	54
Adjustments .....	54
Rewax Belt .....	55

***Chapter 7: Engineering & Test ..... 57***

Manager Settings .....	57
Maintenance Settings .....	59
Motor Test Mode .....	65
Display Test Mode .....	66
Heart Rate Test Mode .....	68

***Chapter 8: Troubleshooting ..... 69***

## **INTRODUCTION**

Welcome to the world of **STAR TRAC**. In your hands is the owner's manual that will acquaint you with your **STAR TRAC 4500 TREADMILL** assembly, operation and maintenance so that you may begin reaching your fitness goals.

The TR4500 is the most comprehensive integration of user needs and the Club's needs designed into a clubs most used cardio vascular product, the Treadmill. The multifunctional display of the TR4500 is the first thing users will appreciate for its style and utility. With a Walkman rest, reading rack, bottle holder and towel hanger stylishly integrated into the display, it is obvious that the design was generated with the user in mind. Further, the simplicity of this programmable treadmill understates the extensive features and usability of this product.

We highly recommend that you read this owner's manual prior to setting up and using your treadmill. The information on the following pages will enable you to begin easily, quickly and safely.

## **WARNING**

Your **STAR TRAC 4500 TREADMILL** is designed for aerobic exercise in a gymnasium or health club environment.

Please check with your physician prior to beginning any exercise program.

Do not push yourself to excess. Stop if you are feeling faint, dizzy, or exhausted.

Use common sense when walking or running on treadmill.

Please read the owner's manual in its entirety before operating the treadmill.

## **IMPORTANT SAFETY INSTRUCTIONS**

### **WARNING:**

This product will be wired for either 120 VAC nominal power input OR 230 VAC nominal input. It is factory-equipped with a specific electric cord and plug to permit connection to the proper electric circuit. Make sure that the product is connected to an outlet having the same configuration as that of the plug. NO adapter should be used with this product. If the product must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel.

### **SAVE THESE INSTRUCTIONS**

## **ATTENTION EQUIPMENT INSTALLERS**

Star Trac recommends that treadmills be spaced a minimum of 1½ feet apart to allow safe and easy ingress. Even more importantly, there must be at least 4 feet of free space behind the treadmills.

As with any motorized equipment, the area where treadmills are located must be free of obstructions and fixtures with sharp edges to prevent injury in the event that a user trips or loses balance and falls.

# **SAFETY INSTRUCTIONS**



- Dutch
- English
- French
- German
- Italian
- Portuguese
- Spanish
- Swedish

# **STAR TRAC 4500-HARDLOOPBAND**

## **VEILIGHEIDSINSTRUCTIES**

### **WAARSCHUWING**

Dit produkt is voor gebruik op een circuit met een nominale waarde van 120 volt en is in de fabriek uitgerust met een speciaal elektrisch snoer en stekker om verbinding met een passend elektrisch circuit toe te staan. Zorg ervoor dat dit produkt verbonden is met een stopcontact dat dezelfde configuratie heeft als de stekker. GEBRUIK GEEN ADAPTER BIJ DIT PRODUKT. Als het produkt opnieuw verbonden moet worden met een ander type van elektrisch circuit, dan moet deze verbinding gemaakt worden door gekwalificeerd onderhoudspersoneel.



**VOORZICHTIG:** NEEM DE STEKKER UIT HET STOPCONTACT VOOR HET REINIGEN OF ONDERHOUD.



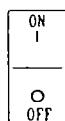
**VOORZICHTIG:** LEES HET INSTRUCTIEHANDBOEK VOORDAT U DE MACHINE BEDIENT.



STOPPEN (VAN ACTIE)



WISSELSTROOM



AAN

UIT

## VEILIGHEIDSINSTRUCTIES

Deze veiligheidsinstructies zijn aan u gericht als de eigenaar van de **STAR TRAC 4500**.  
**HARDLOOPBAND**. Train uw leden en fitness-personeel om deze veiligheidsinstructies te volgen.

### LEES ALLE INSTRUCTIES VOORDAT U DE HARDLOOPBAND GEBRUIKT.

**WAARSCHUWING:** Om het risico van een elektrische schok te verminderen, dient u de stekker van de hardloopband **ALTIJD** uit het stopcontact te nemen voordat u hem schoonmaakt.

#### DOE DIT WEL

Stop de bediening van de hardloopband als u zich duizelig voelt of het gevoel heeft dat u flauwvalt.  
Weet hoe ver u kunt gaan.  
Neem de stekker uit het stopcontact voordat u de band reinigt of welk onderdeel dan ook verwijdert of vervangt.  
Gebruik dit produkt alleen voor het doeleinde waarvoor het bestemd is.  
Verricht regelmatig preventief onderhoud.  
Houd het snoer bij verwarmingssystemen vandaan.  
Wacht totdat de lopende band stil staat voordat u van de hardloopband stapt.  
Houd luchthopeningen vrij van pluizen, haar etc. Bedien de hardloopband nooit met geblokkeerde luchthopeningen.  
Schakel de stroom uit bij de contactschakelaar.

#### DOE DIT NIET

Laat kinderen niet zonder toezicht de hardloopband bedienen.  
Ga de band niet op of af terwijl deze loopt.  
Niet buiten gebruiken.  
Draai de lopende band niet te strak aan.  
Bedien de hardloopband niet als deze een beschadigd snoer of stekker heeft, als hij niet goed werkt of als hij gevallen of beschadigd is. Neem contact op met uw geautoriseerde STAR TRAC detailhandelaar of de onderhoudsafdeling van STAR TRAC op +1 (714) 669-1660 of bezoek onze website op <http://www.startrac.com> voor een onmiddellijke inspectie of reparatie.  
Gebruik de hardloopband niet zonder gymschoenen.  
Laat nooit objecten in het apparaat vallen en steek geen objecten, handen of voeten in welke opening van het apparaat dan ook of onder het apparaat.  
Plaats geen waterflessen of bekers op uw hardloopband tenzij u een houder heeft die speciaal ontworpen is voor hardloopbanden. Gebruik uw hardloopband niet in een omgeving waar sputbussen worden gebruikt of waar zuurstof wordt toegediend.  
Bedien het apparaat niet zonder de motorafscherming of pas het apparaat op geen enkele wijze aan.

# ENGLISH

These safety notes are directed to you as the owner of the **STAR TRAC 4500 TREADMILL**. Please train all your members and fitness staff to follow these safety instructions.

## **DO**

Do encourage your members to discuss their health program or fitness regimen with a health care professional, especially if they have not exercised for several years, are over 35, or are overweight.

Do read all instructions in this manual before using your treadmill.

Do use your treadmill only for its intended use, as described in this manual. Do not use attachments not recommended by the manufacturer.

Do stop operating your treadmill if you feel dizzy or faint.

Do exercise slowly until you reach a level of comfort and security.

Do warm up and cool down before and after each workout.

Do set your goals (see *Getting Started* in Chapter 4).

Do complement your walking, jogging, and running with a nutritious diet.

Do try charting your progress using the feedback from your treadmill.

Do try using the incline feature to burn more calories and strengthen your lower-body muscles.

## **DO NOT**

Do not let unsupervised children operate your treadmill. Supervise invalids or disabled persons who use your treadmill.

Do not leave your treadmill unattended when it is plugged in. Unplug it from the outlet when it is not in use, and before you remove or replace any parts or accessories.

Do not use your treadmill without athletic shoes.

Do not jump on or off your treadmill if the belt is moving.

Do not use or store your treadmill outdoors or in an enclosed pool environment.

Do not ever drop or insert any object, hands, or feet into any opening, or underneath this equipment.

Do not place water bottles or cups on your treadmill unless you are using an accessory attachment designed for the treadmill. Do not use your treadmill where aerosol (spray) products are being used or where oxygen is being administered.

Do not run the equipment with the motor shroud removed, or modify the equipment in any way.

Do not overtighten the running belt.

(Continued)

**DO**

- Do perform regular preventive maintenance.
- Do keep the electrical cord away from sources of excessive heat.
- Do keep the treadmill air openings free of lint, hair, etc.
- Do unplug your treadmill before doing any maintenance or cleaning.

**DO NOT**

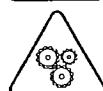
- Do not operate your treadmill if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or if the display shows an error code. Call your dealer or Unisen at (800) 503-1221, or USA 1-714-669-1660 for service.



**CAUTION:** READ THE OWNERS MANUAL COMPLETELY BEFORE OPERATING THIS TREADMILL



**CAUTION:** BEFORE CLEANING OR SERVICING, DISCONNECT POWER SUPPLY



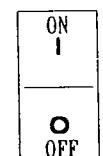
**CAUTION:** MOVING PARTS, KEEP HANDS AND FEET FROM UNDER THE TREADMILL WHEN OPERATING



STOP (OF ACTION)



ALTERNATING CURRENT



ON

OFF

## **MESURES DE PRECAUTION**

Ces instructions sont destinées au propriétaire du **TAPIS STAR TRAC 4500**. Assurez-vous que votre personnel et vos adhérents les suivent toujours.

Encouragez vos adhérents à parler de leur programme d'entraînement à un médecin ou un entraîneur, en particulier s'ils n'ont pas eu d'activité sportive pendant plusieurs années, s'ils ont plus de 35 ans ou s'ils ont des kilos superflus.

Lisez le manuel avant de faire fonctionner le tapis.

Utilisez le tapis exclusivement aux fins dont il est destiné. N'utilisez pas d'accessoires qui n'ont pas été recommandés par le fabricant.

Attachez toujours vos lacets et vêtements quand vous courez sur le tapis.

Arrêtez si vous êtes pris de vertiges ou épuisé.

Commencez toujours à une vitesse lente.

Respectez les périodes d'échauffement et de récupération.

Entrez vos objectifs (voir chapitre 4).

Complétez votre entraînement par un régime alimentaire.

Suivez votre progrès grâce aux informations du tableau de bord.

Essayez d'utiliser l'inclinaison afin de brûler plus de calories et de renforcer les muscles de membres inférieurs.

Ne laissez pas d'enfants non-accompagnés sur le tapis. Une surveillance très stricte est nécessaire si des personnes invalides ou handicapées utilisent le tapis.

Ne laissez jamais le tapis sans surveillance s'il est branché. Débranchez le tapis si vous ne l'utilisez pas ou avant de monter ou démonter des pièces.

Utilisez le tapis uniquement avec des chaussures appropriées.

Ne descendez pas ou ne montez pas sur un tapis qui est en fonction.

N'utilisez ou ne stockez jamais le tapis à l'extérieur ou près d'une piscine.

Ne laissez rien rentrer dans les ouvertures. Ne posez pas vos pieds sous l'appareil.

Ne posez pas de bouteilles ou verres d'eau sur l'appareil sans être équipé avec le ( ) en option.

N'utilisez pas le tapis dans les endroits où des aérosols ou de l'oxygène ont été utilisés.

Débranchez le tapis avant le nettoyage ou le changement de fusibles.

N'enlevez pas de vis, ne modifiez pas l'appareil.

Ne serrez pas trop fort la surface caoutchoutée.

Effectuez régulièrement l'entretien préventif du tapis.

Mettez les fils électriques à l'abri de chaleur.

Enlevez poussière, cheveux etc. de l'aération.

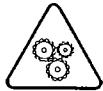
N'utilisez pas cet appareil si les fils ou la fiche sont endommagés, s'il est tombé ou cassé. Appelez votre distributeur pour une révision ou réparation.



**ATTENTION:** LISEZ SOIGNEUSEMENT LE MANUEL D'UTILISATION AVANT D'UTILISER CE TAPIS ROULANT



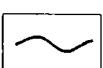
**ATTENTION:** DÉBRANCHEZ A LA SOURCE AVANT D'EFFECTUER UN ENTRETIEN OU UNE RÉPARATION



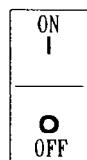
**ATTENTION:** NE PAS GLISSEZ LAS MAÍNS DU LES PIADS SOUS LE TAPIS ROULANT EN ACTION



ARRÊT (MISE HORS SERVICE)



COURANT ALTERNATIF



OUVRE

FERME

# **STAR TRAC 4500 LAUFBAND**

---

## **SICHERHEITSVORSCHRIFTEN**

### **WARNING**

Dieses Produkt ist für den Gebrauch an einer passenden Netzsteckdose mit 220 Volt Spannung bestimmt und werkseitig mit einer dafür vorgesehenen Netzleitung und einem Netzstecker ausgerüstet. Stellen Sie sicher, daß das Gerät nur an einem Anschluß mit gleicher Bauart wie der Stecker angeschlossen wird. VERWENDEN SIE KEINEN ADAPTER FÜR DEN BETRIEB DES TR 4500. Wenn das Gerät zum Betrieb an einem anderen Stromnetz auf einen anderen Netzstecker umgerüstet werden muß, sollte die Umrüstung durch einen qualifizierten Elektriker durchgeführt werden.



**ACHTUNG:** GERÄT VOR DEM REINIGEN ODER WARTEN VON DER STROMVERSORGUNG TRENNEN



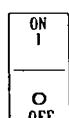
**ACHTUNG:** VOR DER BENUTZUNG SICHERHEITSVORSCHRIFTEN LESEN



BEDIENUNG UNTERBRECHEN



WECHSELSTROM



EIN

AUS

# **SICHERHEITSVORSCHRIFTEN**

Diese Sicherheitshinweise sind an Sie, den Besitzer des Laufbandes **STAR TRAC TR 4500**, gerichtet. Bitte weisen Sie Ihre Mitglieder und Ihre Fitneß-Mitarbeiter an, sich an die folgenden Sicherheitsvorschriften zu halten.

**LESEN SIE ALLE ANWEISUNGEN VOR DER BENUTZUNG DES LAUFBANDES.**

**WARNUNG:** Um das Risiko eines elektrischen Schlag zu vermeiden, nehmen Sie den Stecker des Laufbands vor dem Reinigen **IMMER** aus der Netzsteckdose.

## **SIE SOLLTEN...**

Die Benutzung des Laufbandes beenden, wenn Schwindel oder Benommenheit auftritt.  
An Ihre Grenzen denken.  
Das Laufband vor jeglichen Wartungs- und Reinigungsarbeiten abschalten.  
Das Gerät nur für den vorgesehenen Verwendungszweck benutzen.  
Regelmäßige vorbeugende Wartungsarbeiten durchführen.  
Die elektrischen Leitungen von Wärmequellen fernhalten.  
Den Stillstand des Laufriemens abwarten, bevor Sie das Laufband auseinanderbauen.  
Die Lüftungsöffnungen frei von Staub, Haaren und Ähnlichem halten.  
Das Laufband niemals mit verdeckten Lüftungsschlitzten betreiben.  
Die Stromversorgung immer am Netzschatzer abschalten.

## **SIE SOLLTEN NIEMALS...**

Kinder das Laufband unbeaufsichtigt benutzen lassen.  
Schutzausrüstungen entfernen oder das Gerät umbauen.  
Das Gerät im Freien benutzen.  
Den Laufriemen überspannen.  
Das Laufband mit beschädigter Netzleitung betreiben, wenn es nicht richtig funktioniert, heruntergefallen ist oder beschädigt wurde. Für sofortige Reparaturunterstützung kontaktieren Sie einen autorisierten Händler oder den Kundendienst von STAR TRAC telefonisch unter +1 714 669 1660, bzw. benutzen Sie unsere Web-Seite unter <http://www.startrac.com>.  
Das Laufband ohne die passenden Sportschuhe benutzen.  
Gegenstände in eine Öffnung am Gerät hineinfallen lassen.  
Gegenstände, Hände oder Füße in eine Öffnung am Gerät stecken oder diese unter das Gerät legen.  
Wasserflaschen oder Trinkbecher auf das Laufband stellen, es sei denn, Sie haben ein speziell für diesen Zweck und für dieses Laufband gedachtes Zubehörteil.  
Das Laufband in Räumlichkeiten benutzen, in denen Produkte in Aerosoldosen (Sprays) angewandt werden oder in denen Sauerstoff verabreicht wird.  
Das Laufband mit abgenommener Motorabdeckung laufen lassen, oder das Gerät auf irgendeine Art und Weise verändern.

# **TREADMILL STAR TRAC 4500**

---

## **ISTRUZIONI DI SICUREZZA**

### **ATTENZIONE**

Questo prodotto è da usare su un circuito elettrico con una tensione nominale di 220 volt ed è fornito dalla fabbrica con un cavo elettrico e spina specifici per permettere il collegamento ad un circuito elettrico appropriato. Assicuratevi che il prodotto sia collegato ad una presa che abbia la stessa configurazione della spina. **NESSUN ADATTATORE DEVE ESSERE USATO CON QUESTO PRODOTTO.** Se il prodotto deve essere ricollegato per l'uso su un circuito elettrico diverso, il ricollegamento deve essere effettuato da un elettricista qualificato.



**ATTENZIONE:** PRIMA DI PULIRE O ESEGUIRE LA MANUTENZIONE, TOGLIETE LA SPINA



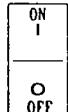
**ATTENZIONE:** PRIMA DI USARE LEGGETE IL MANUALE DELLE ISTRUZIONI



FERMA IL MOVIMENTO



CORRENTE ALTERNATA



ACCESO

SPENTO

## ISTRUZIONI DI SICUREZZA

Queste indicazioni sono indirizzate ai proprietari del **TREADMILL STAR TRAC 4500**. Chiedete a tutti i membri della vostra palestra e al vostro staff di seguire queste istruzioni di sicurezza.

LEGGETE TUTTE LE ISTRUZIONI PRIMA DI USARE IL TREADMILL.

**ATTENZIONE:** per ridurre il rischio di scossa elettrica, staccate **SEMPRE** la spina della corrente del treadmill prima di pulirlo.

### DA FARE

Fermate il treadmill se vi sentite svenire o avete capogiri.  
Siate coscienti dei vostri limiti.  
Staccate la spina prima di pulire, spostare o cambiare qualsiasi parte del treadmill.  
Usate questo prodotto solo per l'uso inteso.  
Eseguite la manutenzione regolare.  
Mantenete la corda elettrica lontana da fonti di calore.  
Aspettate fino a quando il nastro è completamente fermo prima di scendere dal treadmill.  
Pulite le prese d'aria da polvere, capelli e simili. Non usate mai il treadmill con le prese d'aria bloccate.  
Spegnete la macchina tramite l'interruttore.

### DA NON FARE

Non permettete a bambini di usare il treadmill senza sorveglianza.  
Non salite o scendete dal treadmill mentre è in funzione.  
Non usatelo all'aperto.  
Non tirate troppo il nastro.  
Non usate il treadmill se il cavo elettrico o la spina sono danneggiati, se non funziona come dovrebbe o se è caduto o è danneggiato. Contattate il vostro rivenditore autorizzato **STAR TRAC** o l'assistenza clienti dello **STAR TRAC** al numero +1 714 669 1660 o visitate il nostro sito Internet a <http://www.startrac.com>, per esame o riparazione immediata.  
Usate il treadmill solo se calzate scarpe da ginnastica.  
Non lasciate cadere oggetti e non inserite mani o piedi nelle aperture o al di sotto del treadmill.  
Non appoggiate bottiglie d'acqua o bicchieri sul treadmill a meno che non stiate usando un supporto progettato appositamente per il treadmill.  
Non usate il treadmill in posti dove sono usati prodotti aerosol (spray) o dove è somministrato dell'ossigeno.  
Non accendete il treadmill con il coperchio del motore rimosso, e non modificate lo in nessun modo.

# **ESTEIRA STAR TRAC 4500**

## **INSTRUÇÕES DE SEGURANÇA**

### **ADVERTÊNCIA**

Este produto deve ser usado em um circuito com tensão nominal de 220 volts. Ele foi fabricado com um cabo de alimentação e plugue específicos para permitir a sua conexão com um circuito elétrico apropriado. Certifique-se de que o produto esteja conectado a uma tomada com as mesmas configurações do plugue. NÃO UTILIZE ADAPTADORES PARA ESTE PRODUTO. Se for necessário reconectar o produto para utilização em um tipo diferente de circuito elétrico, este procedimento deverá ser executado por pessoal qualificado.



**ATENÇÃO:** ANTES DE LIMPAR OU FAZER MANUTENÇÃO, DESCONECTE O APARELHO DA TOMA DA



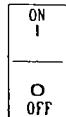
**ATENÇÃO:** LEIA O MANUAL DE INSTRUÇÕES ANTES DE OPERAR A ESTEIRA



PARE (A AÇÃO)



CORRENTE ALTERNADA



1 LIGAR

0 DESLIGAR

## INSTRUÇÕES DE SEGURANÇA

Estas observações de segurança destinam-se à você, proprietário da **ESTEIRA STAR TRAC 4500**. Treine todos os membros e funcionários que utilizarão o equipamento para que sigam estas instruções de segurança.

### LEIA TODAS AS INSTRUÇÕES ANTES DE USAR SUA ESTEIRA

**ADVERTÊNCIA:** para reduzir os riscos de choque elétrico, **SEMPRE** desconecte a esteira da tomada antes de limpá-la

Pare de usar a esteira se você se sentir fraco ou com tontura.

Reconheça seus limites.

Desconecte a esteira da tomada antes de limpá-la ou antes de remover ou substituir qualquer peça.

Utilize este equipamento única e exclusivamente para o seu devido fim.

Faça manutenção preventiva regularmente.

Mantenha o fio afastado de superfícies aquecidas.

Espera até que a esteira esteja completamente parada antes de descer do aparelho.

Mantenha as saídas de ar desobstruídas de fiapos de tecidos, cabelos e outros objetos. Nunca opere a esteira com as saídas de ar bloqueadas.

Desligue o aparelho com o interruptor de força.

Não permita que crianças operem a esteira sem supervisão de um adulto.

Não suba ou desça da esteira enquanto ela estiver em movimento.

Não utilize a esteira ao ar livre.

Não estique demais o tapete da esteira.

Não opere esta esteira se o cabo de alimentação ou o plugue da tomada estiverem danificados, se ela não estiver funcionando perfeitamente ou se tiver sofrido queda ou danos. Procure seu revendedor autorizado STAR TRAC ou o departamento de assistência técnica STAR TRAC pelo telefone 1 714 669 1660 ou acesse nosso "web site" no endereço <http://www.startrac.com> para fazer uma consulta ou conserto imediato.

Não utilize a esteira sem calçar tênis.

Não deixe cair nem introduza nenhum objeto, as mãos ou pés em nenhuma abertura do equipamento ou debaixo deste.

Não coloque garrafas d'água nem copos na esteira se não estiver utilizando o devido acessório projetado para esse fim. Não utilize a esteira onde estejam sendo usados produtos de aerosol (spray) ou em lugares onde esteja sendo administrado oxigênio.

Não opere o equipamento com a tampa do motor removida nem faça nenhuma modificação no equipamento.

# **TAPIZ RODANTE STAR TRAC 4500**

## **INSTRUCCIONES DE SEGURIDAD**

### **ADVERTENCIA**

Este producto estará preparado para utilizarse en un circuito de 220 voltios y se suministra equipado de fábrica con un cable y un enchufe eléctricos específicos para permitir su conexión a un circuito eléctrico apropiado. Asegúrese de que el producto se conecte a una toma de corriente con la misma configuración que el enchufe. NO UTILICE NINGÚN ADAPTADOR CON ESTE PRODUCTO. Si este producto necesita ser modificado eléctricamente para utilizarse en un tipo diferente de circuito eléctrico, dicha modificación debe ser realizada únicamente por el personal de servicio calificado.



**ATENCIÓN:** DESCONECTE EL SUMINISTRO DE CORRIENTE ANTES DE LIMPIAR O REPARAR



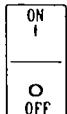
**ATENCIÓN:** LEA EL MANUAL DE INSTRUCCIONES ANTES DE SU UTILIZACIÓN



PARAR (EL FUNCIONAMIENTO)



CORRIENTE ALTERNA



ENCENDIDO

APAGADO

## INSTRUCCIONES DE SEGURIDAD

Estas notas sobre seguridad van dirigidas a Vd. como propietario del **TAPIZ RODANTE STAR TRAC 4500**. Haga que todos los usuarios y preparadores físicos cumplan estas instrucciones de seguridad.

**LEA TODAS LAS INSTRUCCIONES ANTES DE UTILIZAR SU TAPIZ RODANTE.**

**ADVERTENCIA:** Para reducir los riesgos de sufrir una descarga eléctrica, desenchufe **SIEMPRE** el tapiz rodante antes de limpiarlo.

### QUÉ HACER

Detenga el tapiz rodante si se nota desfallecido o mareado.  
Conozca sus limitaciones.  
Desenchufe el tapiz rodante antes de limpiar, quitar o cambiar alguna pieza.  
Utilice este producto sólo para los usos que está diseñado.  
Realice un mantenimiento preventivo de manera regular.  
Mantenga el cable separado de fuentes de calor.  
Espere a que la cinta móvil haya parado antes de descender del tapiz rodante.  
Mantenga las entradas de aire libres de pelusa, pelo y similares. No utilice nunca el tapiz rodante con las entradas de aire bloqueadas.  
Desconecte de la corriente por medio del disyuntor.

### QUÉ NO HACER

No permita que los niños utilicen el tapiz rodante sin supervisión.  
No suba o baje del tapiz rodante mientras está funcionando.  
No debe utilizarse en exteriores.  
No tense demasiado la cinta móvil.  
No utilice este tapiz rodante si tiene el cable o el enchufe dañados, si no funciona adecuadamente o si ha sufrido algún golpe o deterioro. Póngase en contacto con su vendedor autorizado de STAR TRAC, con el departamento de servicios de STAR TRAC llamando al número +1 714 669 1660 o accediendo a nuestra página de la web en <http://www.startrac.com>, para un examen o reparación inmediatos.  
No utilice el tapiz rodante sin calzado deportivo.  
No deje caer ni introduzca ningún objeto, manos o pies en ninguna abertura del aparato o debajo del mismo.  
No deje botellas de agua ni tazas sobre su tapiz rodante excepto si utiliza el accesorio adicional diseñado para este fin. No utilice su tapiz rodante en lugares en los que se están usando productos aerosoles (en spray) o en los que se está administrando oxígeno.  
No encienda este aparato con la cubierta del motor retirada, ni lo modifique de ninguna manera.

# **STAR TRAC 4500-TRÆDEMØLLE**

## **SIKKERHEDSINSTRUKTIONER**

### **ADVARSEL**

Dette produkt er beregnet til brug i forbindelse med et el-net med nominel effekt på 220 volt. Det leveres med særlig ledning og stik fra fabrikken, som kun passer til den korrekte type el-net. Sørg for, at produktet er sat til en stikkontakt, som har samme konfiguration som stikket. DER MÅ IKKE BRUGES ADAPTER TIL DETTE PRODUKT. Hvis produktet absolut skal omstilles til en anden slags el-net, skal omstillingen foretages af kvalificeret servicepersonale.



**FORSIGTIG:** AFBRYD EL-KABLET, FØR DU GØR RENT ELLER SERVICERER.



**FORSIGTIG:** LÆS INSTRUKTIONSHÅNDBOGEN FØR BRUG



STOP (AF FUNKTION)



VEKSELSTRØM



TÆND  
SLUK

## SIKKERHEDSINSTRUKTIONER

Disse sikkerhedsbemærkninger henvendes til ejeren af **STAR TRAC 4500-TRÆDEMØLLEN**.  
Sørg venligst for, at alle medlemmer og alt kondipersonale kender og følger disse sikkerhedsregler.

### LÆS ALLE INSTRUKTIONERNE, FØR DU BRUGER DIN TRÆDEMØLLE.

**ADVARSEL:** For at mindske risikoen for at få elektrisk stød, skal du **ALTID** trække trædemøllens stik ud af kontakten, før du gør den ren.

#### SKAL

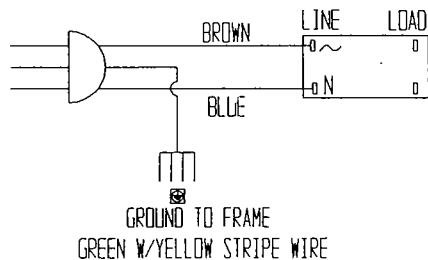
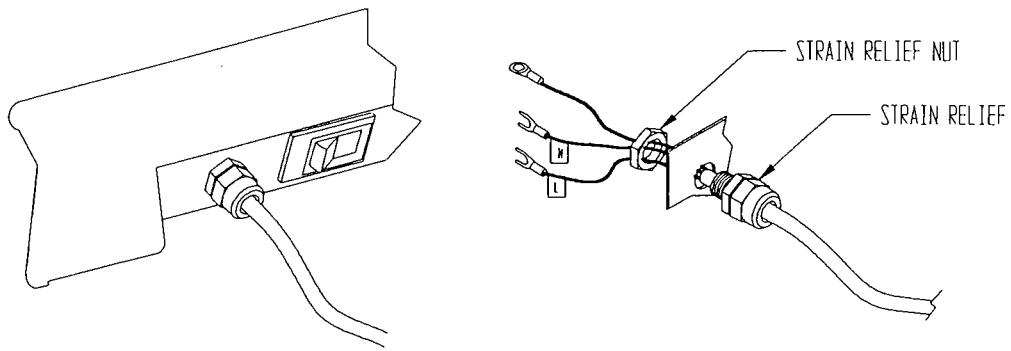
Stig af trædemøllen, hvis du bliver mat i kroppen eller svimmel.  
Kend dine begrænsninger.  
Træk trædemøllens stik ud af kontakten, før du gør den ren, eller fjerner eller udskifter en del.  
Brug kun produktet til det formål, det er beregnet til.  
Foretag forebyggende vedligeholdelse med regelmæssige mellemrum.  
Hold ledningen fri af varmeanlæg.  
Vent til løbebåndet standser, før du stiger af trædemøllen.  
Hold ventilationsåbningerne fri for fnug, hår og lignende. Brug aldrig trædemøllen med blokerede luftventilationsåbninger.  
Sluk for elektriciteten på afbryderkontakten.

#### MÅ IKKE

Tillad ikke børn uden opsyn at bruge trædemøllen.  
Stig ikke på eller af trædemøllen, mens den kører.  
Brug ikke trædemøllen udendørs.  
Stram ikke løbebåndet for meget.  
Brug ikke trædemøllen, hvis ledningen eller stikket er beskadiget, hvis trædemøllen ikke fungerer rigtigt, eller hvis den er faldet ned eller væltet og er blevet beskadiget. Kontakt den autoriserede STAR TRAC, forhandler eller serviceafdelingen hos STAR TRAC Ring på +1 71 46 69 1660 eller du kan få fat i os på vores web-site: <http://www.star-trac.com> for øjeblikkeligt eftersyn eller reparation.  
Brug ikke trædemøllen uden kondisko.  
Undgå at tage eller at stikke genstande, hænder eller fødder ind i en åbning i eller under udstyret.  
Stil ikke vandflasker eller kopper på trædemøllen, medmindre du har dertil beregnet tilbehør, som er specielt designet til trædemøllen. Brug ikke trædemøllen på steder, hvor der bruges aerosolprodukter (spray), eller hvor der administreres ilt.  
Udstyret må ikke køre uden motorafskærmning, og det er ikke tilladt at ændre udstyret på nogen måde.

## POWER CORD REPLACEMENT INSTRUCTIONS

1. TURN THE POWER OFF AND UNPLUG THE TREADMILL.
2. USING A PHILLIPS SCREW DRIVER, REMOVE THE SCREW ON THE CENTER FRONT OF THE MOTOR SHROUD, SEPARATE THE VELCRO BY PULLING AWAY ON THE SIDES OF THE SHROUD THEN SLIDE THE SHROUD UP THE FRONT RAIL TO ACCESS THE POWER CORD CONNECTION.
3. REMOVE THE GROUND SCREW AND DISCONNECT GROUND WIRE.
4. REMOVE THE BREAKER SCREWS AND DISCONNECT THE LINE (~) AND NEUTRAL (N) WIRE.
5. USING A 15/16 OR AN ADJUSTABLE WRENCH, LOOSEN THE STRAIN RELIEF NUT.
6. REMOVE POWER CORD.



7. INSTALL NEW POWER CORD BY SLIDING THE WIRES THROUGH THE MOUNTING PANEL HOLE.
8. TIGHTEN THE STRAIN RELIEF NUT.
9. CONNECT THE LINE AND NEUTRAL WIRES TO THE BREAKER WITH THE BREAKER SCREWS.
10. CONNECT THE GROUND TO THE FRAME WITH THE GROUND SCREW.
11. SLIDE THE SHROUD DOWN THE FRONT RAIL. PRESS THE SIDES OF THE MOTOR SHROUD ONTO THE SIDES OF THE SIDE FRAMES, CAUSING THE VELCRO TO ATTACH. TIGHTEN THE SCREW IN THE CENTER FRONT OF THE MOTOR SHROUD.

# ASSEMBLY AND SETUP



This chapter details how to assemble and set up your **STAR TRAC 4500 TREADMILL**. Please begin by verifying that the following parts were included in your shipment:

Description	Qty.
Frame Assembly w/ Motor Shroud.....	1
Top Rail with Display .....	1
Front Rail .....	2
Side Rail w/ Display Cable .....	1
Side Rail .....	1
Screw, Button Head Socket Cap, 1/4"-28 UNF x 3/8" *	8
Bolt, Hex-head, 5/16"-18 UNC x 6"† .....	2
Washer, Flat, 9/16" I.D. x 1-3/8" O.D.† .....	2
Washer, Flat, 5/15" Standard† .....	2
Hex (Allen) key, 5/64"‡ .....	1
Hex (Allen) key, 1/8"‡ .....	1
Hex (allen) key, 3/32"‡ .....	1
Hex (Allen) key, 5/32"‡ .....	1
Hex (Allen) key, 1/4"‡ .....	1
Bungee cord, 28"‡ .....	1
Screwdriver, Phillips, #2‡ .....	1
Screwdriver (blade-tip), 3/32"‡ .....	1
Wrench, Combo, 9/16" & 7/8"‡ .....	1
Tie, Strap, Mount‡ .....	1
Tie strap, 3-1/2"‡ .....	1
Owner's Manual with Warranty Registration Card .....	1

Should any component not be present or if you have any operational questions, please call Star Trac's Service department at (800) 503-1221 or USA 1-714-669-1660. Specifically refer to your treadmill serial number and model number listed below:

Serial No. \_\_\_\_\_

Model No. \_\_\_\_\_

\*Pre-inserted into handrails and connecting tubes (stubs)

†Pre-inserted into frame rails

‡Part of included **STAR TRAC** tool kit.

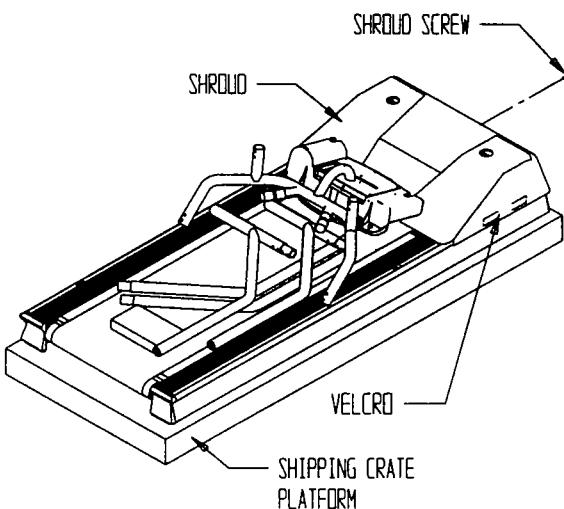
To assemble your **STAR TRAC 4500 TREADMILL**, just follow these steps.

Note: Don't finally tighten the bolts and screws until all the parts are fitted together.

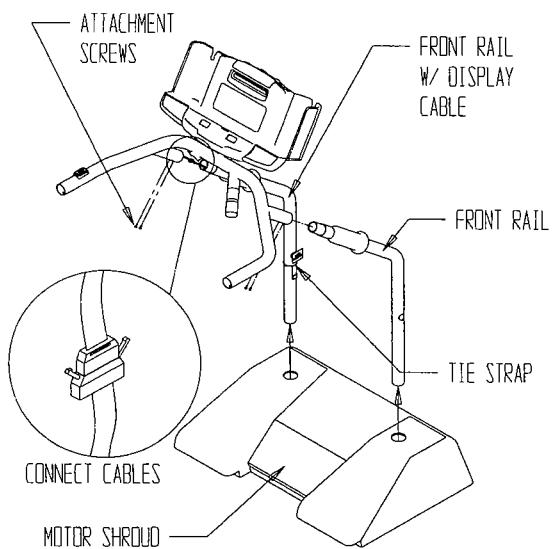
## 1

Remove all the packaging material so that the treadmill is sitting, ready for assembly, on the shipping crate platform. With a helper, lift the treadmill frame from the shipping crate platform and place it in the location where it will be used. Make sure that it is near a power outlet. *Caution:* The motor shroud end of the treadmill is the heavy end, and may need two people to lift it.

Remove the holding screw on the back center of the motor shroud. Detach the Velcro along the inside of the lower side of the shroud. Lift the shroud from the treadmill and place it to the side of the unit.



## 2



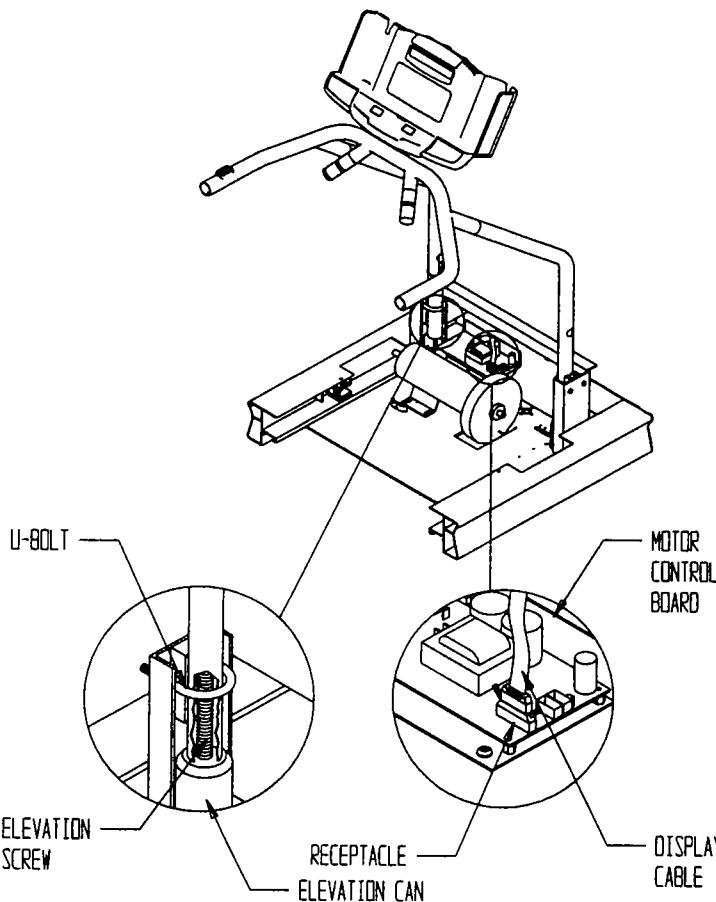
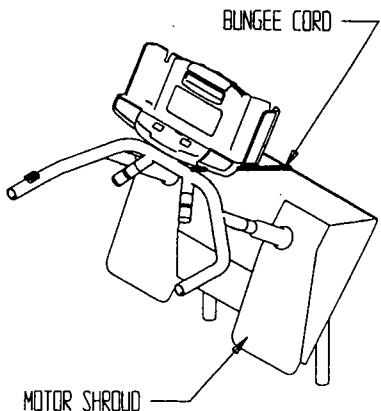
Remove two screws from each front rail. Locate the front rail with the display cable. Remove the tie straps at the top of the front rail, the bottom of the top rail. (Do not remove the tie strap at the bottom of the front rail). Connect the front rail display cable to the top rail display cable. Attach the front rails to the top rail, and secure the front rails with the screws.

Insert the bottom end of the front rails through the holes in the top of the motor shroud. Slide the shroud over the display cable and cable tie. (Do not remove the tie strap at the bottom of the front rail.)

### 3

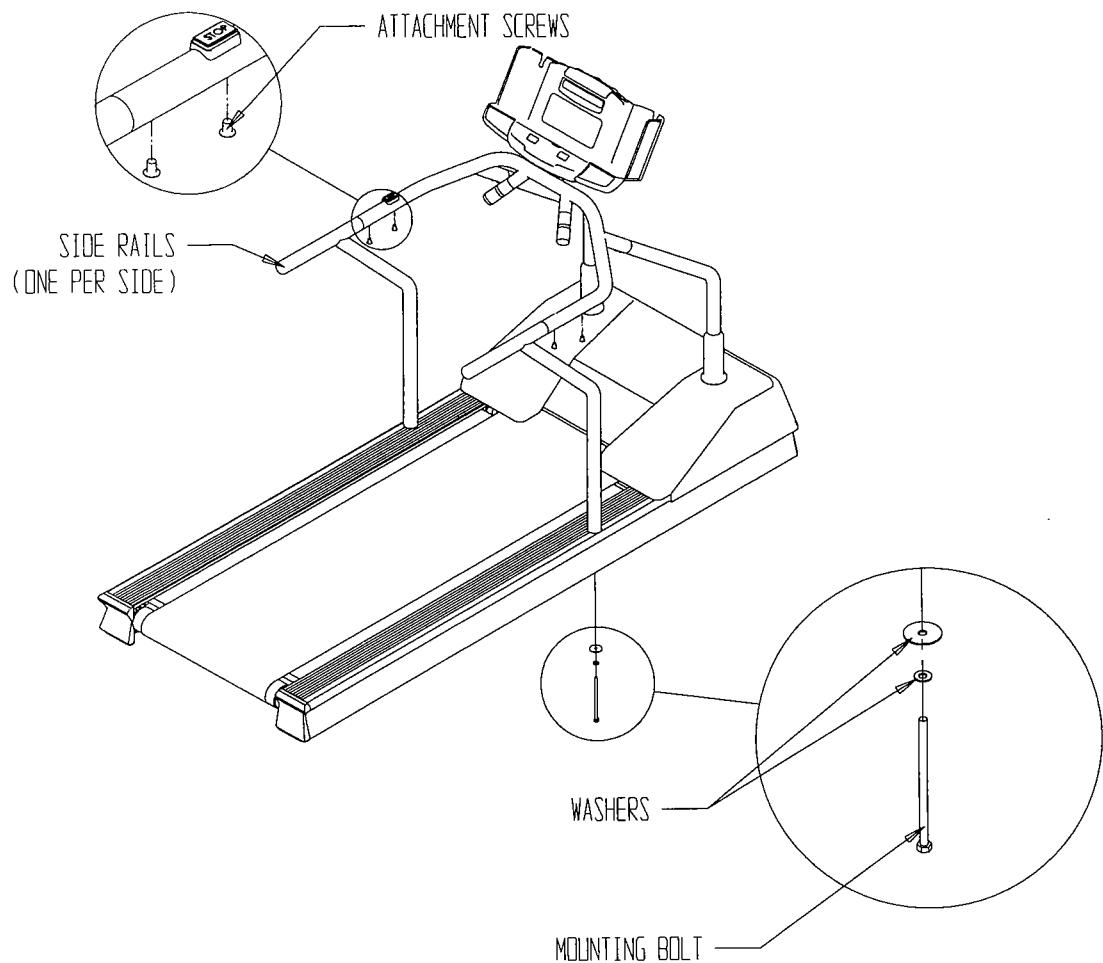
Lift the shroud and secure it to the display control panel support tube, placing the bungee cord around the tube and hooking it under the rim of the shroud as shown. The bungee cord should lift and hold the shroud halfway up the front handrail legs.

NOTE: SHROUD NOT SHOWN FOR CLARITY.



### 4

Lift the front handrail and shroud, and lower the front handrail legs over the elevation screws that stick up from the frame. The legs will pass through a "U" bolt on each side, then rest on the elevation cans. Remove the cable tie that secure the ribbon cable to the front handrail leg. *Caution:* Take care not to put any undue strain on the ribbon cable and connector. Tighten the nuts on the "U" bolts, but leave them loose enough for later adjustment of the front handrail. Insert the ribbon cable connector into the receptacle on the motor control board. It will go in only one way. Push in firmly until the locking arms on the receptacle are engaged.



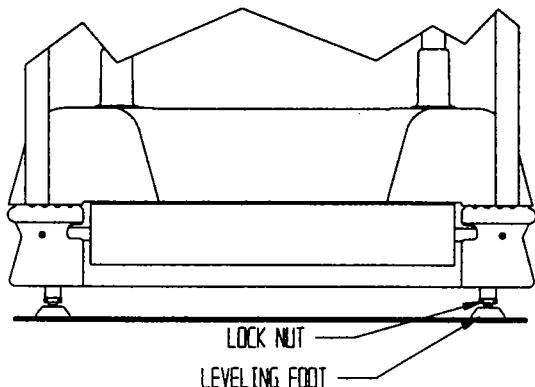
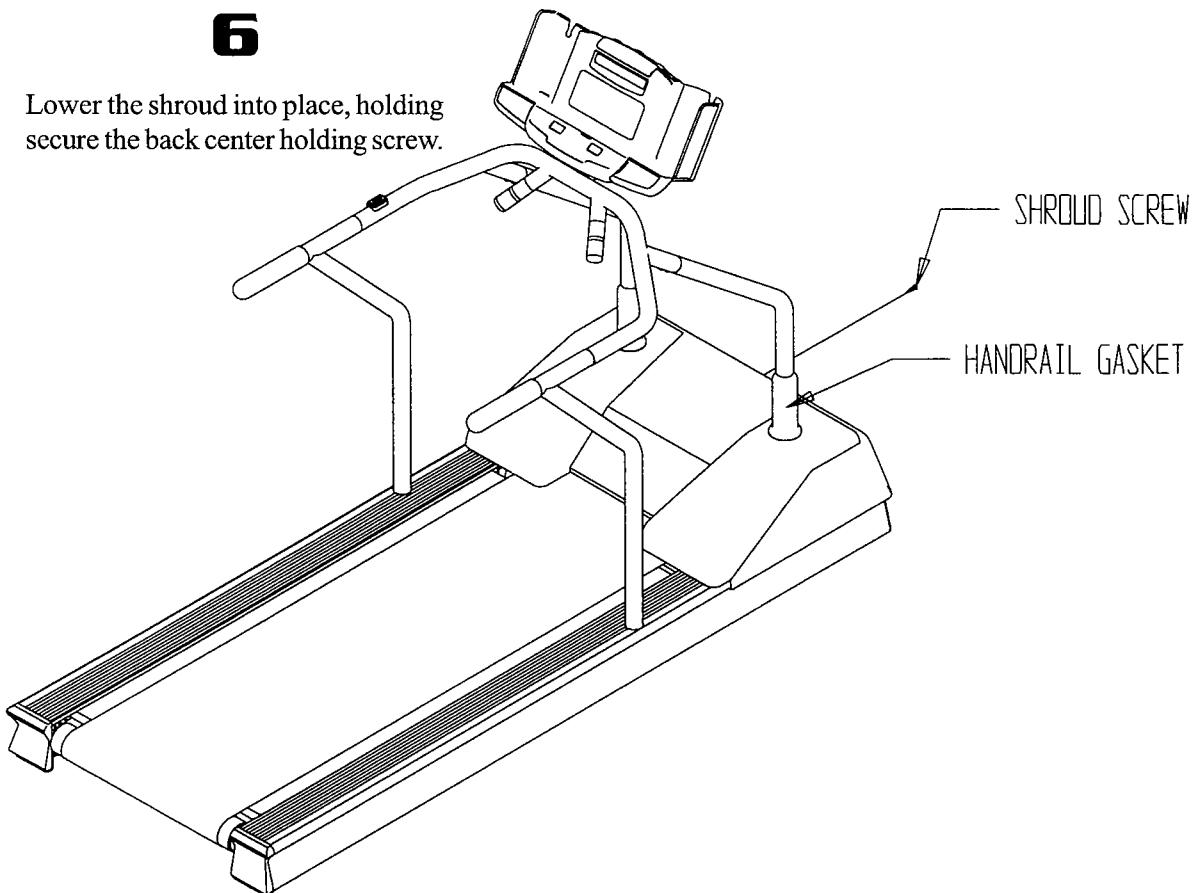
## 5

Remove the last two screws that are on the stub sticking out of the ends of the side rails. Next, remove the mounting bolts and two washers from the lower end of the side rails. Slide the side rail stub into the front rail as shown. Replace two screws per side rail, and tighten loosely.

Install the mounting bolts through the holes in the frame, and screw the bolts into the underside of the side rails. Then tighten all screws and bolts.

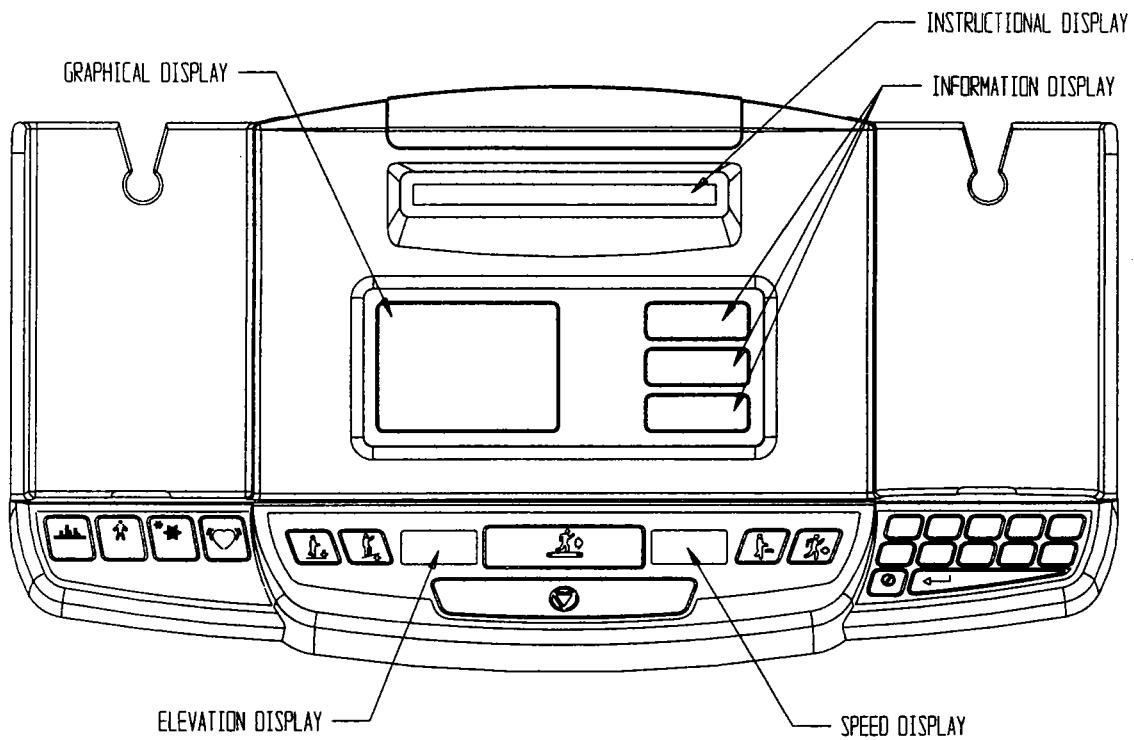
## 6

Lower the shroud into place, holding secure the back center holding screw.



## 7

If necessary, level your treadmill using the two adjustable feet under the tailroller. Loosen the lock nuts, rotate the feet until the treadmill is stabilized, and retighten the lock nuts. You have now completed the assembly of your **STAR TRAC 4500 TREADMILL**.



***STAR TRAC 4500 TREADMILL Display Control Panel***

# OPERATING INSTRUCTIONS

## CHAPTER 3

Operating the **STAR TRAC 4500 TREADMILL** is very easy. Simply step onto the running belt, press , and begin walking or running naturally.

Learning the features and incorporating the **STAR TRAC 4500 TREADMILL** into your members' fitness programs is just as easy. In this chapter, you will learn the display function and how to get the most out of every **STAR TRAC 4500 TREADMILL** workout.

## DISPLAY CONTROL PANEL FEATURES

Your **STAR TRAC 4500 TREADMILL** is equipped to provide you and your users unlimited exercise opportunities. Experiment with its features to find the right combination for your fitness regimen. The Display Control Panel shown on the opposite page features:



**Key:** Starts your treadmill running belt moving. Enters and confirms your workout duration.



**Key:** Pauses your treadmill when pressed once. Ends your workout when pressed twice.

**Graphic Display:** Traces your progress through each of the programs and allows you to anticipate the hills and valley. Display elements illuminate from left to right across the bottom of the display to indicate your progress through the course. At each step, display elements illuminate in columns to indicate your ascent up the gradient that is in effect. In Manual Operation this display shows your progress counter clockwise around a 1/4 mile (400-meter) course, starting from the bottom center.



**Keys:** Adjust running belt speed in 0.1 miles per hour (mph) or 0.1 kilometers per hour (km/hr) increments. To increase or decrease your speed, press the  or  keys, respectively, until the desired number of minutes appears in the Alphanumeric Display, then, press .

The speed cannot be higher than the MX SPD data item (See Chapter 6). If you do not press  within 15 seconds, the previous display will return. These keys repeat as you hold them depressed. These keys also start the running belt at minimum speed from zero.



**INCLINE Keys:** Adjust treadmill incline in 1% increments from 0% through 15% in manual operation. These keys repeat as you hold them depressed. They have no effect during the present programs or the custom program.

**Incline Display:** Show the incline that the user is ascending, from 0% (easiest) to 15% (most difficult).



The duration of your workout thus far in minutes and seconds.



The total number of miles or kilometers you have walked or run thus far.



Your speed in mph or km/hr.



Your incline in % grade.

Group 2 comprises:



Your aggregate caloric expenditure thus far in your workout.

- **LAPS:** The lap (1st, 2nd, etc.) of a 1/4 mile (400-meter) course which your treadmill is simulating for you.
- **PACE:** Your time in minutes over a mile or kilometer.

The Alphanumeric Display also shows heart rate information (see *Heart Rate Monitoring* in this chapter), notification that the workout is done, and scrolling summarized workout data after the workout. This data consists of:

- Total elapsed time
- Distance covered
- Average speed
- Total calories expended
- Laps completed
- Average pace

Every 2000 miles (or 3000 km) the Start-Up Display will also scroll REWAX BELT. See Preventive Maintenance, Chapter 5, for additional information.



**Heart Rate Key:** Checks your heart rate anytime during your workout.  works differently in each treadmill model; see *Heart Rate Monitoring* in this chapter.

**Preset Program Profiles and Indicators:** Approximate graphical representations of the five preset programs, with accompanying indicators to show the program in effect.

## **HINTS AND TIPS FOR GETTING STARTED**

The following hints and tips will assist in training your users to maximize the fitness benefits of your **STAR TRAC 4500 TREADMILL**.

- **Walk or run at a rate that feels comfortable and most natural, yet is sufficiently vigorous to get a good cardio workout.** Your typical speed will be in the range of 4 to 8 mph.
- **Try different walking or running rhythms.** In manual operation, adjust your pace from low speed to high speed, then back to low. As you become more comfortable with your treadmill, try going faster or using the preset programs.
- **Watch the Graphic Display to anticipate terrain changes.** When you use the preset programs, the display shows hills and valleys as tall or short columns. The display also notifies you of incline changes with a series of beeps and a flashing display element.

## **MANUAL OPERATION**

You may immediately begin to use your treadmill under manual control. Just follow these steps:

1. Stand on the running belt and press  or . The belt will slowly reach its minimum speed of 0.5 mph or 1.0 km/hr.
2. If you wish to go faster, press  until your desired **SPEED** appears in the Alphanumeric Display. (You may also lower your speed using .) Alternatively, choose your desired speed with the numeric keys and press . Feel free to change your speed any time during your workout.
3. Adjust your % Incline using the   **INCLINE** keys. The incline ranges from 0% (flat) to 15% (most difficult). Feel free to change your incline during your workout.

4. As you work out, watch your time, distance, and speed in the Alphanumeric Display.
5. If you wish to pause during your workout, press  once. The running belt will slow to a stop, after which you may take 30 seconds to catch a breather, towel off, get a drink, or check your heart rate. If you press  during this 30 seconds, your treadmill will go back to minimum speed as in Step 2. If you do not press  , your treadmill will remain stopped and show the opening display.
6. When you are ready to finish your workout, press  twice. The running belt will slow to a stop and show the Opening Display.

**NOTE:** Your caloric expenditure in manual operation is based on a default weight of 155 pounds (70 kg). You may change this weight using Program 0 below.

## **QUICK START**

**QUICK START** allows you to begin your workout by simply pressing one key. YOU control the speed, incline and distance for a maximum of 99 minutes.

To operate the **QUICK START** program:

*Step One:* Stand on the running belt and press the  key. The running belt slowly accelerates to its minimum speed of 0.5 mph.

*Step Two:* Increase the speed by pressing the  key. By pressing the  key, the speed will be decreased. Speed changes will be in 0.1 mph increments.

*Step Three:* Adjust the elevation by pressing the  key to raise the elevation and the  key to lower the elevation.

The treadmill automatically scans and displays the time, distance, speed, calories, laps, pace and heart rate (if a signal is detected).

You can pause the program by pressing the  key once. Your program will be paused for a maximum of 30 seconds. You can resume the program by pressing the  key.

*Step Four:* To stop the treadmill, press the  key twice. The treadmill slows to a stop.

## **MANUAL PROGRAM**

In the **MANUAL** program, you establish and maintain the minimum and maximum speed, elevation, and elapsed time for up to 99 minutes.

To begin the **MANUAL** program:

*Step One:* Stand on the running belt and press . The Information Center will display  **MANUAL**. Press the  key.

*Step Two:* You will be asked a series of questions. Answer the questions by pressing the   keys until the correct answer is displayed. Press the  key to enter your selection. The treadmill accepts the answer and continues to the next question. The following questions are displayed:

- Weight
- Time

After answering the questions, the treadmill begins operation at 0.5 mph. To increase or decrease the speed, press the   keys.

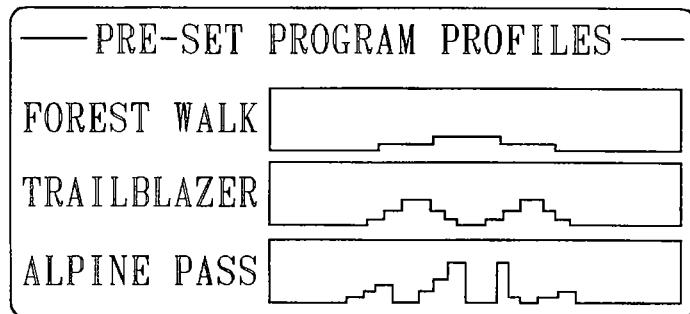
The treadmill automatically scans and displays the time, distance, speed, total calories, laps, pace and heart rate (if a signal is detected).

You can pause the program by pressing the  key once. Your program will be paused for a maximum of 30 seconds. You can resume the program by pressing the START/ENTER key.

*Step Three:* To stop the treadmill, press the  key twice. The running belt slows to a stop.

## PRE-SET PROGRAMS

The PRE-SET programs were designed for optimal interval training. By taking you through various levels of hills and valleys, your caloric expenditure is maximized and your cardiovascular capacity is improved. Each of the PRE-SET programs offers a higher level of intensity.



To begin any of the PRE-SET programs:

*Step One:* Step on the treadmill and press the  key until the desired program is displayed

in the Information Center. Press the  key.

*Step Two:* The treadmill displays a series of questions. Answer the questions by pressing the

  keys until the correct answer is displayed. Press the  key.

The treadmill accepts the answer and continues to the next questions.

The following questions are displayed:

- Weight
- Time
- Speed (Max)
- Incline (Max)

Your program profile will be displayed in the GRAPHICAL display window and your progress through the program is tracked. Each program begins with a two minute warm-up and a two minute cool-down.

You can pause the program by pressing the  key once. Your program will be paused for a

maximum of 30 seconds. You can resume the program by pressing the  key.

*Step Three:* To stop the treadmill, press the  key twice. The running belt slows to a stop.

## **5K LAKE LOOP AND 10K BAY RUN RACE PROGRAMS**

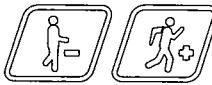
The **5K LAKE LOOP** and **10K BAY RUN** race programs were designed for the serious, as well as the recreational runner. You control the speed and incline to add variety and challenge to your workout. The patented Impact Absorption System (IAS) protects ankles, knees, joints and back while providing a comfortable run. When wearing the chest strap transmitter, your heart rate will be constantly monitored and displayed in the Information Center to assist you in getting the most efficient workout possible.

To begin the **5K LAKE LOOP** or **10K BAY RUN** race programs:

*Step One:* Step on the treadmill and press the  key until **5K LAKE LOOP** or **10K**

**BAY RUN** is displayed in the Information Center. Press the  key to select the race program you desire.

*Step Two:* The treadmill displays a series of questions. Answer the questions by pressing the

 keys until the correct answer appears, then the  key. The treadmill accepts the answer and continues to the next question.

The following questions are displayed:

- Weight

As you begin your workout, the  window displays your progress through your race program.

Each race program begins with a 2 minute warm-up and ends with a 2 minute cool-down.

NOTE: The warm up and cool down times are not included in your actual race time.

You can pause the program by pressing the  key once. Your program will be paused for a

maximum of 30 seconds. You can resume the program by pressing the  key.

*Step Three:* To stop the treadmill, press the  key twice. The running belt slows to a stop.

## MYSTERY HIKE

The **MYSTERY HIKE** offers over 250 different hill and valley configurations to add variety to your workout.

To begin the **MYSTERY HIKE**:

*Step One:* Step on the treadmill and press the  key until **MYSTERY HIKE** is displayed in the Information Center. Press the  key.

*Step Two:* The treadmill displays a series of questions. Answer the questions by pressing the   keys until the correct answer is displayed. Press the  key. The tread mill accepts the answer and continues to the next question.

The following questions are displayed:

- Weight
- Time
- Speed (Max)
- Incline (Max)

*Step Three:* Your program profile will not be displayed in the GRAPHICAL display window. Instead your progress through the program will be tracked. The **MYSTERY HIKE** begins with a two minute warm-up and ends with a two minute cool-down.

You can pause the program by pressing the  key once. Your program will be paused for a maximum of 30 seconds. You can resume the program by pressing the  key.

*Step Four:* To stop the treadmill, press the  key twice. The running belt slows to a stop.

## **CUSTOM PROGRAM**

The **CUSTOM** program allows you to design a custom workout with as many as 10 intervals.

To **CUSTOM** design a program:

*Step One:* Step on the treadmill and press the  key until **CUSTOM** is displayed in the Information Center. Press the  key.

*Step Two:* The treadmill displays a series of questions. Answer the questions by pressing the  $+$ / $-$  (plus/minus) keys until the correct answer is displayed. Press the  key to enter your selection. The treadmill accepts the answer and continues to the next question.

The following questions are displayed:

- Weight
- Select distance or time for total workout.
- Intervals (1–15 = Number of Custom Programmable Segments)

*You will notice the display reads: TIME 1, SPEED 1, and INCLINE 1. Enter your desired time, speed and incline % by pressing the   keys until your answer is displayed. Press the  key to enter your selection. The treadmill's computer accepts your answer and moves on to the next interval as TIME 2, SPEED 2, INCLINE 2. This continues until all the chosen number of intervals are entered.*

You can pause the program by pressing the  key once. Your program will be paused for a maximum of 30 seconds. You can resume the program by pressing the  key.

*Step Three:* To stop the treadmill, press the  key twice. The running belt slows to a stop.

## **DYNAMIC HEART RATE CONTROL**

**(Selected Models - Polar Telemetry Recommended)**

### **Program Definition**

This heart rate feature is designed to gradually elevate your heart rate to the upper end of your selected training range, then gradually decrease your heart rate to the lower end of your selected training range using speed and incline. During the workout, this cycle will repeat several times, creating an interval training effect that is customized to the user's desired heart rate training range.

### **Benefits of Heart Rate Intervals**

By including interval exercise in your regular aerobic program, greater effects are noticed. Your heart and muscles will adapt to the increases in demand by utilizing stored calories for energy more effectively. Dynamic Heart Rate Control may potentially result in more calories expended. It will strengthen the heart, provide stress relief and variety to a workout. This program is more effective in training the body to remove excess lactic acid from the muscles.

### **How To Use Dynamic Heart Rate Control**

Note: For best results, use a heart rate chest strap. If user is wearing a chest strap, the machine will automatically use the Polar Data. Contact heart rate grips may not give an accurate heart rate when exercising over 4 mph.

1. The user can enter the program two ways:

- Press the  key at the opening display and select 1, or
- Enter the Dynamic Heart Rate Program by pressing the  key and selecting Dynamic HR Control.

2. The message center will display "**HR Control program varies speed and incline to alter your heart rate between limits - select upper and lower heart rate limit**". Press ENTER to skip this message.
3. The message center will then display "**Age = XX .. Press Enter**". Enter your age using the numeric keys.
4. The message center will then display "**Weight =133 (default setting)**". Enter most accurate weight using the numeric keys and press ENTER.
5. The message center will then display "**Select UPPER HR limit - Enter UPPER HR XXX**". This indicates the high end of your training range. To accept this value, press the ENTER key. If you wish to change this value, enter a new value using the numeric keypad and then press the ENTER key. The default is based on 75% of the maximum heart rate.

- The message center will then display “Select LOWER HR limit - Enter LOWER HR XXX”. This indicates the low end of your training range. To accept this value, press the ENTER key. If you wish to change this value, enter a new value using the numeric keypad and then press the ENTER key. The default is based on 60% of the maximum heart rate. (Note: This feature requires at least an 18 BPM range between the low and high heart rates to ensure an interval workout.)

To calculate your training zone, use the following formulas :  
(theoretical max HR = 220 - Age)

**Heart Rate Training Range Upper Level**

$$\frac{\text{Your Theoretical Max}}{\text{Training Range Upper Limit}} \times 0.75 =$$

**Heart Rate Training Range Lower Level**

$$\frac{\text{Your Theoretical Max}}{\text{Training Range Lower Limit}} \times 0.60 =$$

- The message center will then display “Enter MAX speed = XX.X”. This is the maximum speed your treadmill will reach during your workout. To accept this speed, press the ENTER key. Use the numeric keypad to change to your desired speed. (Note: For speeds over 4 mph, the use of a Polar heart rate monitor is recommended for accurate monitoring.)
- The message center will then display “Choose goal...1 = Time...2 = Calorie...3 = Distance”. Select a workout goal of time, calories or distance using the numeric keys and press ENTER.
- The message center will then ask you to “Grip handles” or if you are wearing a Polar chest strap, the heart rate will automatically appear.

**During the Workout**

- During the heart rate controlled workout, the treadmill will respond every 20 seconds to the heart rate. The program uses the heart rate to adjust the intensity of the workout. It will adjust speed and (if necessary) incline to elevate the heart rate to the upper end of the training range, then it will gradually decrease elevation and (if necessary) speed, to take the user to the lower target heart rate. A typical 20 minute workout may repeat this pattern 3 - 5 times.
- The program will display various motivating and interesting information throughout the workout. After the workout is complete, the program will scroll the summary workout information.
- If, for any reason, the treadmill does not read your heart rate signal, the treadmill will gradually decrease the workout intensity. After a heart rate signal is re-established, the interval training program will resume.

## **HEART RATE MONITORING**

Heart rate monitoring allows you to determine if your treadmill workout is too challenging or not challenging enough. Monitoring heart rate is easy with the **STAR TRAC 4500 TREADMILL**. Depending on the model you are using, you may monitor your heart manually and/or automatically. Your goal will be to keep your exercise heart rate at 60 to 90 percent of the theoretical maximum for your age as listed on the Target Heart Rate table and graph in chapter 4.

**NOTE:** The Heart Rate monitor is not a medical test, nor is it designed as a medical test. It is simply a guide to target heart rate training. Please consult with your physician prior to engaging in any strenuous physical activity.

## **MANUAL HEART RATE MONITORING**

If your treadmill is not equipped with contact rings or Polar wireless heart rate chest strap reception capability, you may manually check your heart rate before, during or after a workout. Just follow these steps:

1. Press  to enter the Heart Rate Test.
2. Find your pulse on your neck, then press  on a beat, as you count "1".
3. On successive beats, count 2, 3, ..., 9, and on the tenth beat, press  again.
4. See your heart rate in beats per minute (BPM) in the Alphanumeric Display. Press  to exit.

## **CONTACT HEART RATE MONITORING**

**(SELECTED MODELS)**

If your treadmill is equipped with contact rings, you may automatically check your heart rate. Just follow these steps:



1. Press .

2. Grasp the stainless steel contact rings. You do not have to squeeze tightly. SEEKING HR will be displayed. After about 20 seconds, your heart rate in beats per minute (BPM) will be displayed in the Alphanumeric Display continuously. Contact heart rate may not give accurate BPM when exercising over 4.0 mph.



3. Press  again, or release the handlebars, if you wish to remove your heart rate from the display.

## **POLAR HEART RATE MONITORING**

**(SELECTED MODELS)**

If your treadmill is equipped with Polar wireless heart rate chest strap reception capability, you may automatically check your heart rate. Just follow these steps:

1. Before beginning your workout, or during a pause, moisten the back of the transmitter on the chest strap (not included). Place the strap snugly around your chest with the transmitter resting directly over your sternum.



2. Press . SEEKING HR will be displayed. After about 20 seconds, your heart rate in beats per minute (BPM) will be displayed in the Alphanumeric Display continuously.



3. Press  again, or remove the chest strap, if you wish to remove your heart rate from the display.

**NOTE:** The performance of the transmitter may be affected by body types, body oils, metal in clothing, and outside electrical interference. Always be sure that the transmitter and skin are in good contact. Avoid operating other electrical equipment near your treadmill when you use the chest strap.

## **FitLinxx**

If your club or fitness center is equipped with FitLinxx and you have been assigned an active ID number, just follow these steps:

*Step One:* Step on the treadmill and enter your five digit FitLinxx ID number by pressing the 0---9 keypad (not all facilities are FitLinxx equipped, check with facility management before entering an ID.) Once all five numbers are entered, press ENTER.

*Step Two:* If your ID was valid, follow the scrolling instructions of: PRESS PROGRAM (to choose one of the preset programs available on the TR4500) or PRESS START (press the START key for immediate use of the treadmill) or PRESS “♥” (to choose a heart rate program). If your ID was invalid, try to enter your FitLinxx ID again. If after a few attempts, your ID is not accepted, contact a club employee for assistance.

**NOTE:** You can pause your workout by pressing the “STOP” key once. Your program will pause for a maximum of 30 seconds. You can resume the program by pressing the “START” key.

*Step Three:* To stop the treadmill, press the “STOP” key twice. The running belt slows to a stop.

Once you have completed your workout, time, distance and calories will automatically be sent to the onsite FitLinxx management system for review by a qualified instructor or trainer.

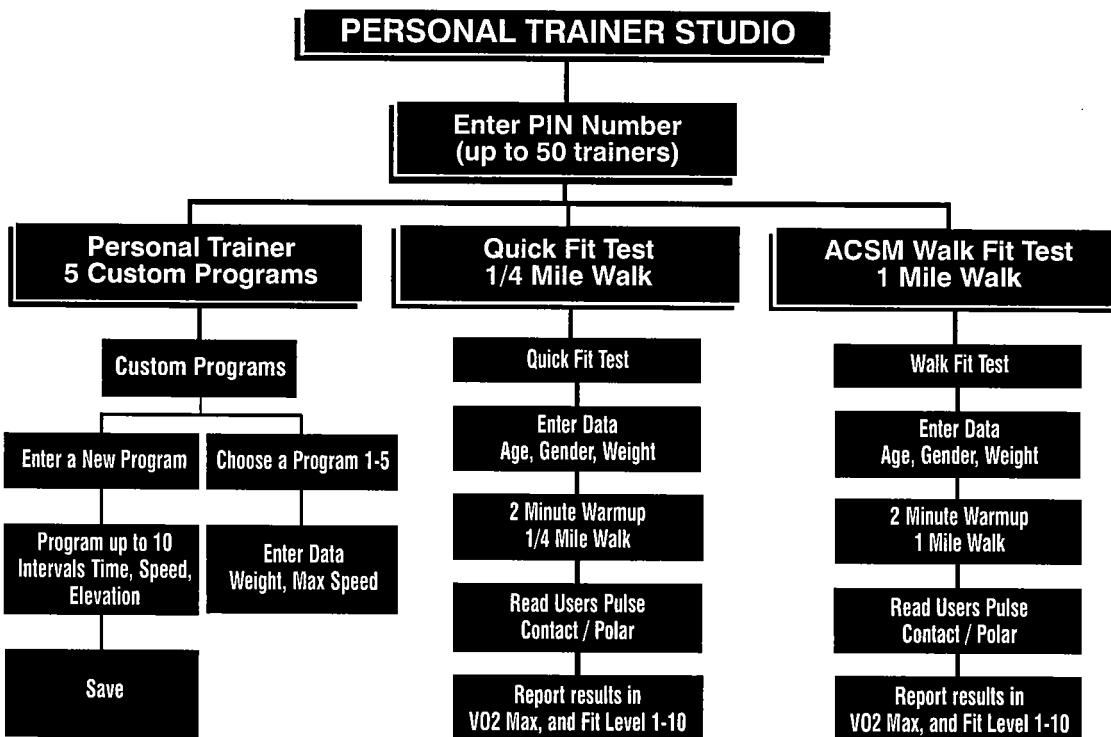
# PERSONAL TRAINER STUDIO

## CHAPTER 4

The unique Personal Training Studio was developed by Star Trac in conjunction with focus groups of the personal training industry. The Personal Trainers told Star Trac that they needed three things: customization of their clients workouts, accountability - meaning having their clients actually perform the amount and intensity of cardio exercise that is prescribed, and feedback to the user so that they can accurately assess their cardio progress. We give you the system to meet all of these need in one key, with the P.T. Studio.

### USING PERSONAL TRAINER STUDIO

After you have been assigned a PIN number by the Club Coordinator or manager, you may now enter the Personal Trainer Studio. Personal Training Studio is simple to understand and simple use. The following chart defines the basic functionality of this feature.



**Custom Programs:** each trainer is assigned a PIN code by the club or fitness director. Each PIN code allows storage of 5 custom programs with up to 10 intervals each. Your personal profiles can be further customized to suit specific client needs by entering a maximum speed at run time. The level control scales the elevation of the profile while the Max Speed entry ensures that your client will not exceed their abilities.

## ***FITNESS TESTING***

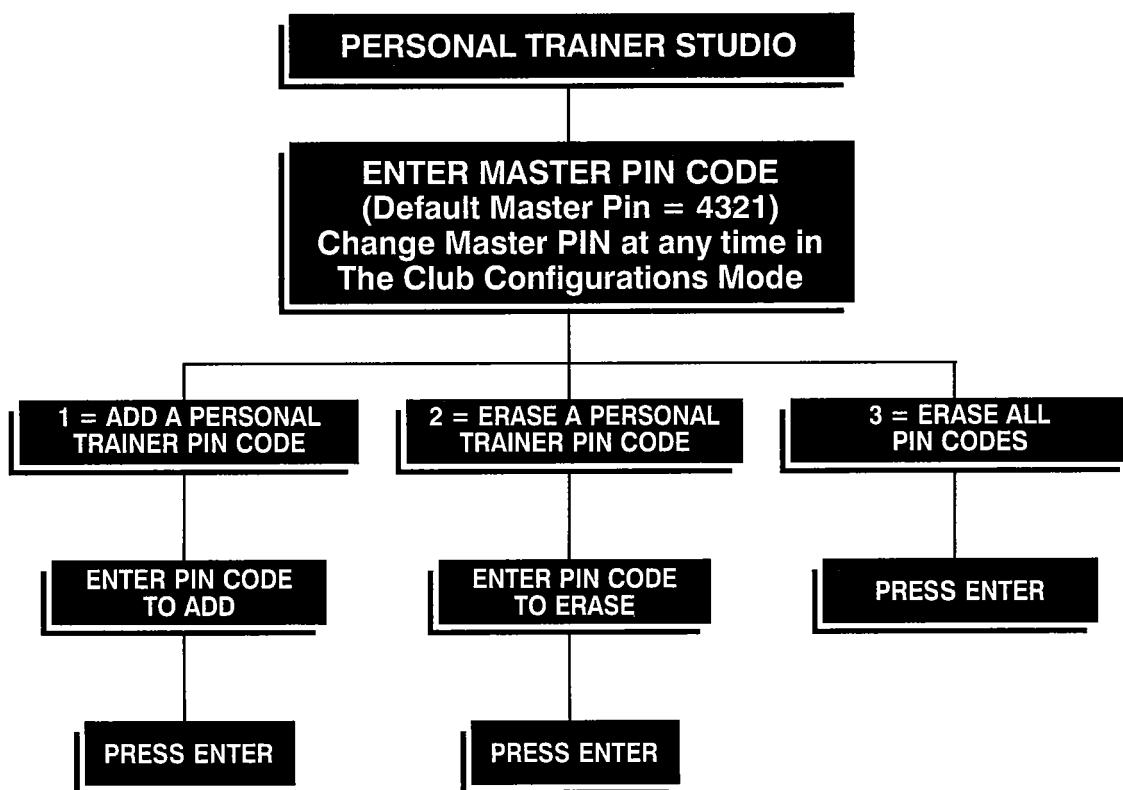
**ACSM 1 Mile Walk Fit Test:** is the most accurate treadmill fitness test, as documented by the American College of Sports Medicine, that requires only heartrate as feedback from the user. Walk Fit is a 1 mile walking test that requires the subject to travel 1 mile at their **fastest possible** walking speed. The subject maintains control by adjusting their speed as necessary during the test, and then checking their heart rate manually or by using the contact heart rate or polar monitoring system at the end of the test. The heart rate results are compared with charted data for the corresponding age and gender of the subject. The result is given on a scale of 1-10 and includes the calculated VO2 max for the subject. VO2 max is a physiological measurement of a bodies ability to absorb oxygen an has specific correlation to you fitness level.

This test was performed on over 1000 people ages 18-69, male and female. The results of the Walk Fit test were compared to VO2 Max scores of the same subjects, and found to have the highest correlation to actual VO2 testing of any other fitness test utilizing heartrate feedback.

**Quick Fit Test:** is the same fitness assessment as Walk fit except that it requires the subject to walk only 1/4 mile after the 2 minute warmup, thereby making this a quick and reliable method of monitoring progress.

## **ENTERING NEW PIN NUMBERS:**

The master PIN code is required to assign and delete or add personal trainer PIN numbers.



# **PERSONAL TRAINER Studio PROGRAM WORKSHEET**

Personal Trainer Password: \_\_\_\_\_

## **INSTRUCTIONS:**

Complete the following program worksheet.

1. In order to receive a PIN #, the manager will need to issue one.
2. Enter time, speed and distance on worksheet provided.

TIME (00:15 sec. - 99 min.), SPEED (.5 mph - 10 mph) and INCLINE (1% - 15%)

To transfer information to the 4500 treadmill:

3. Press "Personal Trainer Studio" button, ENTER your password.
4. Press 1 for Personal Program.
5. Press 6, to ADD or DELETE a program.
6. Press 1 to ADD a program.
7. ENTER number of intervals from 1 to 10. Follow the prompts and use your worksheet.
8. Press ENTER to save your program.

## **PROGRAMS**

	PROGRAM 1			PROGRAM 2			PROGRAM 3			PROGRAM 4			PROGRAM 5		
	Time	Speed	Incline												
Interval 1															
Interval 2															
Interval 3															
Interval 4															
Interval 5															
Interval 6															
Interval 7															
Interval 8															
Interval 9															
Interval 10															

**NOTE:** 1. Users can either be assisted into their training program or the Personal Trainer can give their password to the user to use individually.  
2. Managers - be sure to keep track of all Personal Trainer passwords.

## TRAINING INFORMATION

### CHAPTER 5

To assist you in your training program, this chapter provides you with exercise principles, tips for training and hints to stay motivated climbing up the conditioning ladder.

### ***THE FIRST STEP TO A BETTER LIFESTYLE***

With your **STAR TRAC 4500 TREADMILL**, you've taken an important first step to achieving your fitness goal. But, it's important to have the right fitness tools to stay motivated and achieve results. About half of all people who start an exercise program quit within 6-12 months. What is the key to success for the other half? Motivation!

As you may know, exercise reduces the factors associated with the development of heart disease, hypertension, diabetes, obesity and back disorders. Researchers have concluded that a healthful life-style including regular exercise can extend your life expectancy by as much as fifteen years! More importantly, exercise will help make all your years-no matter how many there are- productive and enjoyable.

What constitutes a regular exercise regimen? If you stick with a consistent workout program for 30 minutes, three times a week, for 3 months, you be on your way to a long-term fitness program. Part of the motivation for a regular exercise regimen will stem from the results you will both see and feel after three months. In fact, many exercisers start to experience results in as early as one week!

### ***GETTING STARTED - WALKERS AND RUNNERS***

For fitness newcomers or veterans, your **STAR TRAC 4500 TREADMILL** offers tailor-made walking and running programs. The following information will be useful when putting together your own exercise program.

#### **Assessing Fitness Level**

Conducting a cardiovascular endurance assessment is a great way to start an exercise regimen. With a simple 1 mile walking test on your Star Trac 4500, the results provide great baseline information to help determine the proper intensity levels and it serves as a great motivational tool for showing improvements over time. Below is a simple test to follow. This assessment should only be used with apparently healthy adults.

## ACSM 1 MILE WALK TEST

**ACSM 1 Mile Walk Fit Test:** is the most accurate treadmill fitness test, as documented by the American College of Sports Medicine, that requires only heartrate as feedback from the user. Walk Fit is a 1 mile walking test that requires the subject to travel 1 mile at their **fastest possible** walking speed. The subject maintains control by adjusting their speed as necessary during the test, and then checking their heart rate manually or by using the contact heart rate or polar monitoring system at the end of the test. The heart rate results are compared with charted data for the corresponding age and gender of the subject. The result is given on a scale of 1-10 and includes the calculated VO<sub>2</sub> max for the subject. VO<sub>2</sub> max is a physiological measurement of a bodies ability to absorb oxygen an has specific correlation to you fitness level.

This test was performed on over 1000 people ages 18-69, male and female. The results of the Walk Fit test were compared to VO<sub>2</sub> Max scores of the same subjects, and found to have the highest correlation to actual VO<sub>2</sub> testing of any other fitness test utilizing heartrate feedback.

**Quick Fit Test:** is the same fitness assessment as Walk fit except that it requires the subject to walk only 1/4 mile after the 2 minute warmup, thereby making this a quick and reliable method of monitoring progress.

### The Warm Up

Warming-up prepares you for physical activity by increasing body temperature, allowing the muscles to relax and contract more smoothly and efficiently. Good warm-up exercises include walking, bicycling, jogging and light calisthenics. Proper warm-up may also help prevent injuries and reduce the likelihood of cardiac abnormalities. A mild sweat is a good indication that the body is sufficiently warmed-up.

### Pre-Exercise Stretching

A flexibility program prior to walking or running is designed to help improve performance or reduce the risk of injury in the activity. When you are stretching, remember these simple rules:

- An active warm-up is recommended preceding vigorous stretching exercises . If stretches are performed, they should be done with caution, as to not over stretch muscles.
- Maintain constant pressure during the stretch. The degree of stretching should not cause significant pain.
- Hold the stretch for 10-15 seconds and follow with dynamic movement.
- Repeat each stretch two or three times.
- If you feel yourself bouncing at any time during the stretch or if you feel pain, STOP.

The following muscle groups should be stretched/warmed up for any walking or running program:

The following muscle groups should be stretched/warmed up for any walking or running program:

- ❖ Quadriceps
- ❖ Hamstrings
- ❖ Calves

- ❖ Outer hips
- ❖ Groin muscles
- ❖ Back muscles

- ❖ Chest
- ❖ Shoulder muscles
- ❖ Shins

## Determining Your Target Heart Rate Range

### LOWER TARGET HEART RATE

**220**

—   Your Age    
=   Estimated Max. Heart Rate    
—   Resting    
=   Value    
x   60%    
=   Estimated Target    
+   Resting    
  
=   Target Heart Rate @ 60%  

### UPPER TARGET HEART RATE

**220**

—   Your Age    
=   Estimated Max. Heart Rate    
—   Resting    
=   Value    
x   80%    
=   Estimated Target    
+   Resting    
  
=   Target Heart Rate @ 80%  

Lower Target Heart Rate

Upper Target Heart Rate

### **F.I.T. Principle**

Every cardiovascular program should be developed based on frequency, intensity and duration.

- 1) **Frequency** - the number of exercise sessions per week.

Regular exercise should be performed at least three or four days week to be beneficial, although fewer sessions may be sufficient for some. Those in superior physical condition typically train five to seven days per week.

- 2) **Intensity** - how hard each exercise is.

Intensity is dependent upon one's fitness level. The range established by American College of Sports Medicine is 60% to 90% of maximal heart rate. If you are a beginning exerciser maintaining an intensity level around 60% is beneficial. Typically , an estimated heart rate range is determined using a formula of 220-Age, factoring in resting heart rate, then multiplying by the desired percentage. See the chart below.

If your **STAR TRAC 4500 TREADMILL** has contact heart rate or Polar® compatibility, monitoring your heart rate will be easy. However, if your need to monitor your pulse manually, find the carotid or radial artery with your index finger, take a ten second count and multiply by six to determine heart rate.

Another common method for measuring intensity is Rate of Perceived Exertion (RPE). This method provides a scale in which an exerciser can subjectively determine how hard the exercise feels while working in a target training range. Descriptive words correspond with a 0 through 10 rating scale. The target range to exercise is between 4 and 6 on the rating scale. (This is a great method to use for those taking medications that effect one's heart rate and for those who want to fine tune how to be in touch with how their bodies respond to exercise). See the chart to the right.

**3) Time** - the duration of each exercise session.

The optimum duration of an exercise session depends on the intensity. Typically, the exercise session last for at least 20-30 minutes, although highly conditioned individuals often train continuously for an hour or longer. The duration of training is sometimes increased while intensity is decreased. This happens early in the training program to prepare the musculoskeletal system for vigorous exercise and to reduce the chance of injury.

<b>0</b>	<b>Nothing at All</b>
<b>0.5</b>	<b>Very, Very Weak</b>
<b>1</b>	<b>Very Weak</b>
<b>2</b>	<b>Weak</b>
<b>3</b>	<b>Moderate</b>
<b>4</b>	<b>Somewhat Strong</b>
<b>5</b>	<b>Strong</b>
<b>6</b>	<b>Very Strong</b>
<b>7</b>	<b>Very Strong</b>
<b>8</b>	<b>Very, Very Strong</b>
<b>9</b>	<b>Very, Very Strong</b>
<b>10</b>	<b>Very, Very Strong</b>

**REMEMBER:** Use the F.I.T. principle as a guide to establish your program, however make sure that you pay attention to how your body feels. Under-exercising may not be adequate for desired results. However, over-exercising can lead to injuries.

### **The Cool Down**

A gradual cool down helps prevent blood from pooling in your legs which may result in feeling light headed and dizzy. Active contraction of your legs and arms during the cool down helps pump blood back to your heart and brain. It is also important to stretch your muscles during the cool down. Use similar stretching exercise that you did during the warm up (See muscles listed in the warm up section). Stretching in this phase can be held for a longer period to help avoid muscle stiffness.

## ***CLIMBING THE CONDITIONING LADDER - SUGGESTED PROGRAMS***

The programs outlined below were developed by the director of services at the Lutheran General Hospital in Illinois. They were developed to help maintain or improve one's level of fitness, depending on the current fitness level. Follow each of the 6 week programs as they move in progression. Once Program V is achieved continue at the same level of intensity for continued

programs, however, add variety by changing around workouts per week, duration or add some interval training (high intensity mixed with low intensity 70% - 90%). To add variety to intensity make use of the incline feature on you Star Trac 4500. This feature gives you an incline range from 0% to 15%.

<b>Program I:</b>				
<b>Week</b>	<b>Heart Rate (%)</b>	<b>Duration (minutes)</b>	<b>Workouts per Week</b>	
1,2	60 to 65	15	3	
3,4	60 to 65	15	3	
5,6	60 to 65	15	3	

<b>Program II:</b>				
<b>Week</b>	<b>Heart Rate (%)</b>	<b>Duration (minutes)</b>	<b>Workouts per Week</b>	
1,2	65 to 70	20	3	
3,4	65 to 70	20	3	
5,6	65 to 70	20	3	

<b>Program III:</b>				
<b>Week</b>	<b>Heart Rate (%)</b>	<b>Duration (minutes)</b>	<b>Workouts per Week</b>	
1,2	70 to 75	20	4	
3,4	70 to 75	25	4	
5,6	70 to 75	25	4	

<b>Program IV:</b>				
<b>Week</b>	<b>Heart Rate (%)</b>	<b>Duration (minutes)</b>	<b>Workouts per Week</b>	
1,2	75 to 80	25	4	
3,4	75 to 80	25	4	
5,6	75 to 80	30	4	

<b>Program V:</b>				
<b>Week</b>	<b>Heart Rate (%)</b>	<b>Duration (minutes)</b>	<b>Workouts per Week</b>	
1,2	80 to 85	30	4	
3,4	80 to 85	35	4	
5,6	80 to 85	35	4	

## **PROGRAM VARIATION ON THE TR4500 TREADMILL**

Everyone can benefit from using treadmills because walking, jogging, and running provide results. Your Star Trac 4500 Treadmill gives you infinite workout possibilities. Here are some suggested programs for the deconditioned, average and athletic users.

### **Deconditioned (beginning) Exercisers**

This group ranging from the overweight, cardiac rehabilitated to the senior population requires more personal attention and one on one feedback for motivation rather than fancy programs built into the treadmill. Keeping everything simple is key. Before starting to exercise, becoming acquainted with basic treadmill features, including emergency stop button helps to make the exercise experience more fulfilling. The manual program or the advanced manual program is a great place to start. The user, at all times has control of his/her workout, and all basic information feedback is provided. Another program recommended for this group is the heart rate control program. This program is great for learning how the heart rate responds to various levels of intensity. However knowing one's target training range is necessary to operate this program. Starting speed for this group ranges from 2.0 to 3.0 MPH. The incline shouldn't exceed 5% elevation unless instructed different by a fitness professional. Making use of the cool-down button is recommended for a gradual cool down, which helps prevent blood pooling in the extremities. Progression of intensity and time is gradual weekly and frequency progress may not occur until after 4 weeks.

### **Average Exercisers**

This group is classified by those who live somewhat active lifestyles (exercising about 2X a week) or fit into the age category of 18-35. Confidence levels from this group are higher than the deconditioned group, therefore the willingness to try new or more advanced programs are greater. While most tend to enter immediately into a quick start, encouraging use of other programs may keep participation consistent and workouts more alive. The Forest Walk, Trailblazer or Alpine Pass offer great variations that make good use of incline making a running or walking workout more interesting and challenging. The Dynamic Heart Rate Control program is a good way to monitor and challenge intensity ranges which is great for achieving results in your cardiovascular endurance program.

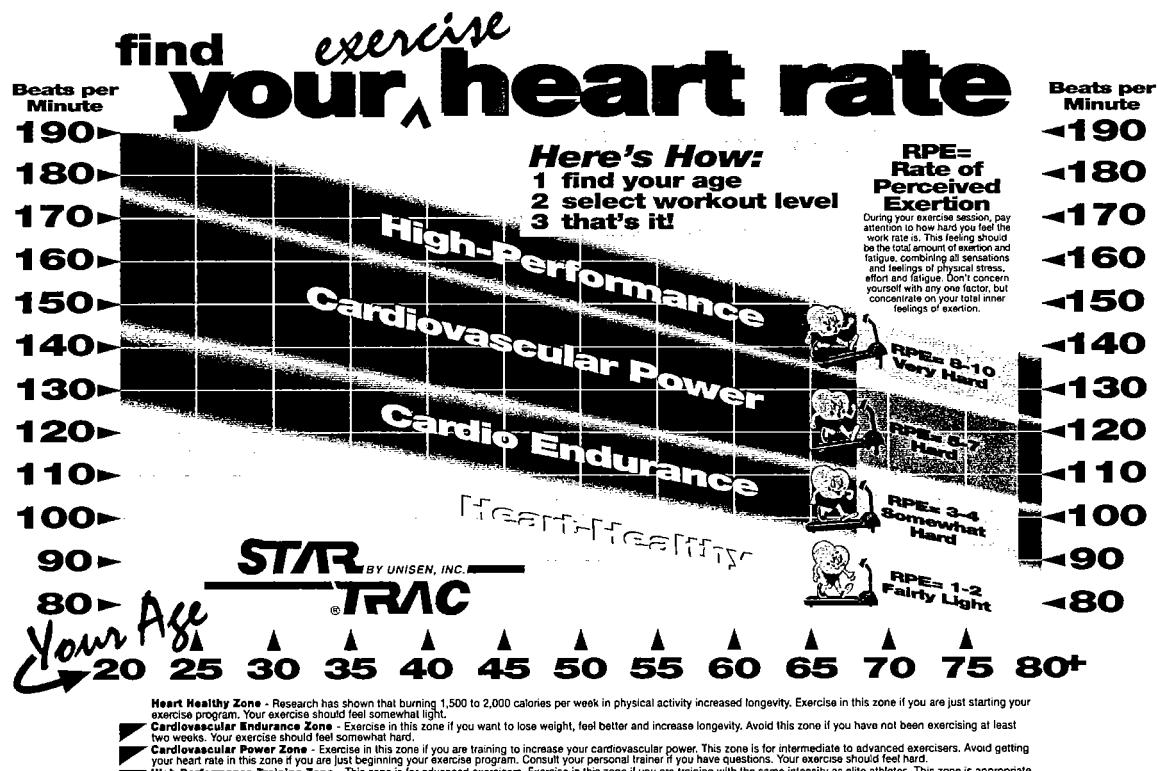
Starting speed for this group ranges from about 3.0 to 3.5 MPH. Typically exercisers in this category will not use elevation, however it is strongly encouraged for varied intensity and variability. Exercisers in this category may not be comfortable exceeding 10% incline. Progression of intensity and time is gradual weekly and frequency progress may not occur until after 4 weeks.

## Athletic Exercisers

Competitive and advance exercisers often look for varied programs for sports enhancement or maintenance. A great sports enhancement program is Custom Interval. This program allows the user to set all parameters of intensity and duration for up to 10 intervals. The custom interval program is ideal for speed training, or anaerobic training. If competition is an interest the 5k and 10k runs offer the user a route to follow and a means to monitor progress. If working the hamstrings or challenging the legs is a goal, take the incline to the limit (15%) with the Hill Program. While many of the programs include a warm-up phase, in the Manual Program or Custom Interval make sure a warm-up and cool-down period is factored in. If you are doing a running workout, a good starting speed is 5.0 MPH. If you are doing a walking or jogging workout, a good starting speed is 3.8 MPH.

## Target Training Chart

Use the following table for a quick glance at your target training zone for both heart rate and rate of perceived exertion.



## **TIPS TO STAY MOTIVATED**

**Set Goals and Reward yourself:** Determine precisely what you want to achieve. By setting challenging, specific goals, you are setting yourself up to achieve them. When you achieve those goals, reward yourself. "It's crucial (to reward yourself)," according to Lauve Metcalfe, Director of Program Development at the Campbell Institute for Health and Fitness in Camden, New Jersey. "Who quits a program because he's having too much fun?" Example of tangible rewards: A new pair of running shoes if you knock a minute off your time in the mile.

**Schedule your workout:** Get into the habit of working out at the same time each day. And, write that time on your calendar. Make keeping your workout schedule as important as eating or sleeping.

**Watch your progress:** Follow your movement on the Graphic Display to help pass time and cut down on boredom.

**Plan an active vacation:** If you know you're going on a walking tour of Paris or on a mountain hiking trip next summer, you'll look forward to getting into shape for it.

**Exercise in numbers:** Get a workout partner or exercise in a group. This will offer you support and a level of accountability, (not to let your partner or group down for not showing up).

**Train for a race or enter an event:** A race is a great goal toward which to work, and the excitement of competition is sure to keep you going. Try a 5K or a 10K run.

**Avoid too much too soon:** Stress and discomfort of an over aggressive program can be overwhelming and lead to injuries.

**Vary your workouts:** Once accustomed to a program vary the workout so that your routine doesn't become mundane. It's also important to recruit new muscle fibers to a new exercise to keep the body stimulated to make improvements.

# PREVENTIVE MAINTENANCE



Star Trac strongly recommends performing regular preventive maintenance on your **STAR TRAC 4500 TREADMILL**. Without regularly scheduled maintenance, normal wear and tear may cause cumulative effects, such as misalignment or premature wear. This may result in downtime. For this reason, we highly recommend following the maintenance schedules below. Also, report unusual symptoms, such as display codes and blown circuit breakers, to **STAR TRAC PRODUCT SUPPORT DEPARTMENT** at (800) 503-1221, or USA 1-714-669-1660.

## DAILY MAINTENANCE

- Remove excessive accumulations of dust, dirt, and other substances by using a clean soft cloth and a liquid non-abrasive cleaner, such as Formula 409 or FANTASTIK. Wipe down the display board handrails, shroud, heart rate grips (if avail.). **Note:** Do not spray directly onto the display board or heart rate grips, do not use cleaner under the running belt.
- To ensure the longevity of the running belt, clean under the running belt with a soft, dry cloth. To clean, slide the cloth between the running belt and deck from one side of the frame to the other (you may need a ruler to slide the towel under the belt). Then, holding the edges of the cloth, pull the cloth from the headroller down to the tailroller. **Note:** Do not clean the running belt by activating the treadmill.
- Inspect the running belt for alignment and tension. Do not tighten the running belt every day. If you notice slipping, adjust the running belt tension by using the instruction in **Adjustments-Slipping-Running Belt**, which follows or contact Product Support, see section Product Support for instructions.
- Ensure the power cord is not under the treadmill and away from the elevation screws. This will prevent the power cord from being pinched or bind up the elevation screws.

## WEEKLY MAINTENANCE

- Vacuum the floor under and around the treadmill. Do so with the treadmill at its maximum elevation or moved to another spot. **Note:** Careful not to damage the power cord.
- Inspect the inside surface of the running belt and the top surface of the running deck for unusual wear. Check whether the belt feels glazed (a smooth almost melted appearance). If the running belt appear glazed, replace the running belt and flip or replace the running deck. **Note:** Never install a running belt on a used deck.

- Inspect the display and handrail screws for loosening and retighten if necessary.
- Inspect the display panel/keypad for wear.

## **Bi-WEEKLY MAINTENANCE**

- Raise the motor shroud and suspend it from the display neck with the Bungee Cord, from your **STAR TRAC TREADMILL Tool Kit**. Vacuum around the motor and its ventilation holes, avoid bumping or damaging parts normally covered by the shroud. **Note:** This maintenance step must be done with the treadmill unplugged and turned off.

## **MONTHLY MAINTENANCE**

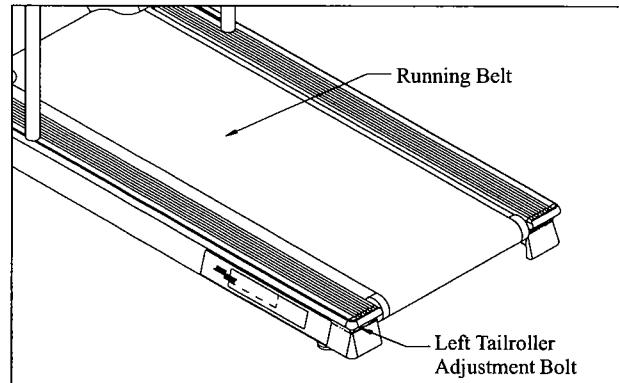
- Wipe the elevation screws down with a clean dry cloth and coat them with silicon lubricant spray to prevent rust accumulation.

## **ADJUSTMENTS**

The running belt and its headroller, drive belt, tailroller, and running deck are designed to be self-centering, slip-free, and smooth-operating without need for frequent and critical adjustments. Running belt sideward movement, slipping, or grinding after extended use, or thumping during initial use, may be corrected by the following procedures:

**Change Sideward Movement to TRACKING:** If the running belt is not centered on the tailroller and is either too far left or right, adjust tracking using the following steps:

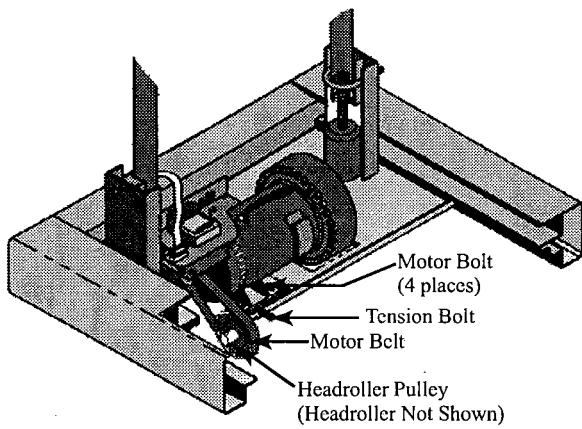
1. Turn treadmill on. Increase speed to 3.0 mph (5.0 kph).
2. Adjust tracking by adjusting the tailroller Allen screws located at the back sides of the tailroller with a 1/4" Allen wrench in 1/4 turn increments. If the running belt is tracking to the left, adjust the running belt to track to the right. Tighten the left tailroller Allen screw by turning clockwise or loosen the right tailroller bolt by turning counter-clockwise.



If your running belt is tracking to the right, then adjust the running belt to track to the left. Tighten the right tailroller Allen screw by turning clockwise or loosen the left tailroller bolt by turning counter-clockwise.

3. After running belt appears to be tracking properly, increase speed to 10 mph (16 k) and verify belt stays centered.

**Slipping—Running Belt:** Lift the motor shroud and run the running belt slowly at 1 to 2 mph (2 to 3 km/hr). Watching the headroller, walk on the belt and try to slow it down by gently applying pressure with your feet while holding the handrails. If only the running belt, and not the headroller, slows down, tighten the running belt by turning both the right and left tailroller adjustment bolts clockwise one-quarter turn. Repeat this adjustment until the running belt no longer slips, ensuring that you turn the bolts an equal number of turns. If the headroller and the running belt both slow down, tighten the drive belt by the following procedure:



**Slipping—Drive Belt:** Incline the treadmill to 5% to provide clearance underneath. Move the **ON/OFF** switch to **OFF**, unplug the treadmill, and lift the motor shroud, holding it raised with the bungee cord that you used during assembly, if that is convenient. With a 1/2" socket wrench, loosen the four motor bolts. Turn the tension bolt in the middle of the motor bracket 1/4 turn clockwise with the same wrench, stretching the drive belt. Tighten the motor bolts, replace the shroud, plug the treadmill in, turn it on, push **START** and test for slipping as before. Repeat this step if necessary.

**Thumping:** Turn the treadmill off. Turn the right and left tailroller adjustment bolts counter-clockwise with the 1/4" hex key until the running belt is loose. Note the number of times each bolt turned. Remove excess accumulated running deck wax from the tailroller with a credit card, a putty knife, or other flexible plastic implement. Tighten the running belt by turning the adjustment bolts clockwise as many turns as they were loosened. Turn the treadmill on and check for sideward movement and slipping of the running belt, further turning the adjustment bolts as above if necessary.

## **REWAX BELT**

Periodic running belt rewaxing virtually eliminates belt down time, and maximizes the life of the belt. Whenever the present distance is 2000 miles (or 3000 km) more than the LST DCK (last deck

*(Continued)*

service), the start-up display will scroll REWAX BELT. This is a reminder to have your maintenance or service provider perform this 5 minute belt rewaxing *at your convenience*. (Immediate service is not required). Wax is included in the treadmill.

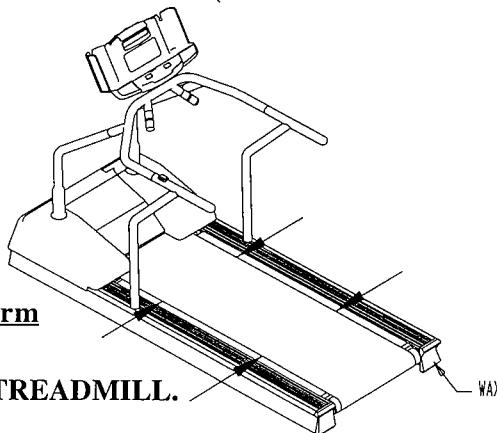
## TOOLS & MATERIALS

- 1 Bottle of Wax Powder
- 1 Clean Towel
- 1 Paint Stick or Ruler
- Diluted All-purpose Cleaner (409), or Bristle Brush

## PROCEDURE

**Apply wax powder while belt & deck are still warm (5 minutes minimum use) for optimum benefit.**

1. **CAUTION: POWER OFF AND UNPLUG THE TREADMILL.**
2. **CLEAN DECK & BELT:**
  - A. Using the stick or ruler, slide a towel under the middle of the belt from one side of the frame to the other.
  - B. Hold the edges of the towel; pull to the tailroller; pull to the headroller; then pull the belt down to wipe the remaining belt. TIP: Fold the dirty towel & shake into trash.
3. **LIFT BELT:** Lift the left side (facing display) of the belt, about 12 inches down from the cover (see figure). Hold the belt up to elevate the belt from the deck.
4. **SPREAD WAX:** Flip the nozzle on the cap of the wax bottle. Point the nozzle at the deck. Be sure that the bottle is tilted at a downward angle. Squeeze the wax bottle twice between the running belt and the deck. TIP: Gently shake bottle between each squeeze.
5. Repeat steps 3 & 4, about 18 inches from the end of the deck.
6. Repeat steps 3 through 5, on the right side of the belt/deck.
7. **WALK:** Plug in treadmill. Power ON the treadmill. Start the treadmill at 1 mph and walk on all sections of the belt and deck for 1 minute to ensure the wax has been evenly distributed and worked-in properly.
8. **CLEANUP:** Power OFF the treadmill. Remove any excess wax with diluted cleaner (409) and towel. TIP: Blow away extra wax first (like dust), then wipe.
9. **DISPLAY UPDATE:** Update the LST DCK service mileage to remove the REWAX BELT message.
  - A. Power ON the treadmill.
  - B. Enter MAINTENANCE SETTINGS (see Chapter 7)
  - C. Press the INCLINE DOWN key until the display window reads LST DCK.
  - D. Press the HEART key to automatically enter the present distance.
  - E. Press the START key to enter and update the display.
  - F. Press the STOP key to exit MAINTENANCE SETTING.



After having used your **STAR TRAC 4500 TREADMILL** for many workouts, you may wish to change some of its settings.

## MANAGER SETTINGS

The Manager Settings allow you to query and modify the basic settings of your treadmill. To enter Manager Settings:

- Press and *hold* **□**, **1**, and **START** together.
- Release **1**.
- Listen for a beep and see MANAGER SETTINGS in the display momentarily.
- Release the remaining keys. See UNITS in the Alphanumeric Display.

The following keys are available in MANAGER SETTINGS:



**INCLINE** Keys: Display the next and previous data item, respectively. Keys will repeat if held.



**SPEED** Keys: Adjust the value of the displayed data item up and down, respectively, in increments of 1 unit or 0.01 unit, as appropriate for the data item. They do no save the new value – see **START** below.



**START** Key: Updates (saves) the value of the displayed data item in erasable programmable read-only memory (EPROM).



**STOP** Key: Exits Settings Mode and restarts the treadmill greeting.



**Number/Program Select Keys:** Enter new data item values.



**Heart Rate Key:** Displays the default value of the data item, whereafter you may save it using **START**.

To leave Manager Settings, press **STOP**.

The items that you may display and change with the previous keys are:

Item	Lowest Value	Default Value	Highest Value	Meaning
UNITS	—	English	—	English = units of lb., miles, hours, minutes; Metric = units of kg., km, hours, minutes.
MN SPD	0.1	0.5	2.5	Minimum speed in mph (UNITS=English), or km/hr (UNITS=Metric).
MX SPD	5.0	10.0	20.0	Maximum speed in mph (UNITS=English), or km/hr (UNITS=Metric).
EL OPT	—	ON	—	ON=Elevation function enabled. OFF=Elevation function disabled.
TIME	5	99	99	Maximum time in minutes allowed for program, including warm-up and cool-down.
OP HRS	0	0	65,535	Total operating hours.
DIST	0	0	65,535	Total treadmill miles (UNITS=English), or km (UNITS=Metric).
WEIGHT	0	155	399	Default (to user), typical weight in lb (UNITS=English), or kg (UNITS=Metric).
SER NO	0	0	65,535	Treadmill serial number.
LANG	—	English	—	Language in English, Dutch, French, German, Portuguese, Spanish, Swedish, or Italian.
ENTRY	—	Units	—	Speed entry: First character is UNITS, or TENTHS.
HR CON	—	—	—	ON=Heart Rate function enable. OFF=Heart Rate function disable.

## MAINTENANCE SETTINGS

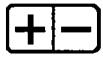
Maintenance Settings includes all of the items in Manager Settings, plus additional items for Service and Diagnostic use. Your Service Representative may need to check accumulated data about the past usage of your treadmill, test its motor and display controls, or investigate error messages. For these reasons, your treadmill is equipped with Maintenance Settings. To enter Maintenance Settings:

- Press and *hold* **□**, **2**, and **START** together.
- Release **2**.
- Listen for a beep and see MAINTENANCE SETTINGS in the display momentarily.
- Release the remaining keys. See UNITS in the Alphanumeric Display.

The following keys are available in MAINTENANCE SETTINGS:



**INCLINE** Keys: Display the next and previous data item, respectively. Keys will repeat if held.



**SPEED** Keys: Adjust the value of the displayed data item up and down, respectively, in increments of 1 unit or 0.01 unit, as appropriate for the data item. They do not save the new value – see **START** below.



**START** Key: Updates (saves) the value of the displayed data item in erasable programmable read-only memory (EPROM).



**STOP** Key: Exits Configure Mode and restarts the treadmill greeting.



**Number/Program Select Keys:** Enter new data item values. If the UNITS data item is displayed, **5** starts Display Test Mode and **3** starts Motor Test Mode.



**Heart Rate Key:** Displays the default value of the item, whereafter you may save it using **START**. Exception: Displays DISTANCE instead of 0 for LSTDCK and LSTBLT. Use **2** and **START** to reset the “error” data items to zero after service. These items are NO STO through EL NOZ and LSTERR through LST TM in the list below.

To leave MAINTENANCE SETTINGS, press **STOP**.

The items that you may display and change with the previous keys are:

Item	Lowest Value	Default Value	Highest Value	Meaning
UNITS	—	English	—	English = units of lb., miles, hours, minutes; Metric = units of kg., km, hours, minutes.
MN SPD	0.1	0.5	2.5	Minimum speed in mph (UNITS=English), or km/hr (UNITS=Metric).
MX SPD	5.0	10.0	20.0	Maximum speed in mph (UNITS=English), or km/hr (UNITS=Metric).
EL OPT	—	ON	—	ON=Elevation function enabled. OFF=Elevation function disabled.
TIME	5	99	99	Maximum time in minutes allowed for program, including warm-up and cool-down.
OP HRS	0	0	65,535	Total operating hours.
DIST	0	0	65,535	Total treadmill miles (UNITS=English), or km (UNITS=Metric).
WEIGHT	0	155	399	Default (to user), typical weight in lb (UNITS=English), or kg (UNITS=Metric).
SER NO	0	0	65,535	Treadmill serial number.
LANG	—	English	—	Language in English, Dutch, French, German, Portuguese, Spanish, Swedish, or Italian.
ENTRY	—	Units	—	Speed entry: First character is UNITS, or TENTHS.

*(Continued)*

Item	Lowest Value	Default Value	Highest Value	Meaning
HR CON	—	OFF	—	OFF=HR control disabled. ON=HR control enabled.
HRT	—	CNT DN	—	CNT DN=manual countdown heart rate; POLAR, CONTACT; or BOTH (Polar and contact).
10 REV	22.0	30.7	74.0	Inches of running belt travel for 10 flywheel revolution, always measured in inches. Nominal values are: <ul style="list-style-type: none"> <li>• 1.6" pulley: 27.5</li> <li>• 1.7" pulley: 29.1</li> <li>• 1.8" pulley: 30.7</li> <li>• 2.1" pulley: 35.8</li> </ul>
CNT/REV	31	31	125	Number of counts for each motor shaft revolution. Values are: <ul style="list-style-type: none"> <li>• RPM sensor at flywheel notches: 31</li> <li>• RPM sensor at motor shaft optical disk: 125</li> </ul>
MIN PWM	2	30	55	Pulse duty cycle to obtain the selected MN SPD. Divide MN PWM by 512 to get % duty cycle.
1/2 MAX	25	130	170	Pulse duty cycle to obtain 1/2 maximum speed. Divide 1/2 MX by 512 to get % duty cycle.
MAX PWM	86	230	255	Pulse duty cycle to obtain the selected MX Spd. Divide MX PWM by 512 to get % duty cycle.
DATE	1.00	1.98	12.99	Treadmill manufacture date.

(Continued)

Item	Lowest Value	Default Value	Highest Value	Meaning
NO STO	0	0	255	Number of time Stop Switch was down or disconnected on power-up since last reset.
KEY DN	0	0	255	Number of times key other than <b>5</b> or <b>3</b> was down on power-up since last reset.
NO RPM	0	0	255	Number of times no RPM was sensed since last reset.
SP CHG	0	0	255	Number of times speed changed suddenly more than 2 mph (UNITS=English) or 2 km/hr (UNITS=Metric) since last reset.
EL STL	0	0	255	Number of times elevation failed to change (stalled) since last reset.
EL RNG	0	0	255	Number of times elevation was out of range (not between 0% and 15%) at power-up since last reset.
EL LOST	0	0	255	After pressing <b>START</b> and after reaching 0% reset, the number of times elevation went beyond 0% to 15%, since last reset.
EL NOZ	0	0	255	After pressing <b>START</b> , during 0% reset, the number of times elevation went beyond 0% to 15%, since last reset.
ELZERO	175	240	242	Representation of voltage to elevation motor to obtain 0% elevation. Multiply ELZERO by 0.019608 to get actual voltage.

*(Continued)*

Item	Lowest Value	Default Value	Highest Value	Meaning
ELMAX	25	57	170	Representation of voltage to elevation motor to obtain maximum elevation (incline). Multiply ELMAX by 0.019608 to get actual voltage. 120 volt treadmill = 57 230 volt treadmill = 80
LSTERR	0	0	25	Representation of the last error: 18=NO STO 19=KEY DN 20=NO RPM 21=SP CHG 22=EL STL 23=EL RNG 24=ELLOST 25=EL NOZ
LSTELV	0	0	255	Target elevation (Incline) A-D value at last error. Multiply LSTELV by 0.019608 to get actual voltage. Multiply LSTELV by -0.082 and add 19.67 to get approximate degrees.
LSTPOT	0	0	255	Representation of voltage to elevation motor at last error. multiply LSTPOT by 0.019608 to get actual voltage. Multiply LSTPOT by -0.082 and add 19.67 to get approximate degrees.
LSTRES	0	0	2	1=Incline was returning to 0% at start-up at last error. 2=Incline had finished returning to 0% at last error.

*(Continued)*

Item	Lowest Value	Default Value	Highest Value	Meaning
LSTSSP	0	0	200	Set speed in tenths of mph (UNITS=English), or tenths of km/hr (UNITS=Metric) at last error.
LSTPWM	0	0	255	Pulse duty cycle at last error. Divide LSTPWM by 512 to get % duty cycle.
LSTMSP	0	0	200	Measured speed in tenths of mph (UNITS=English), or tenths of km/hr (UNITS=Metric) at last error.
LST TM	0	0	6,000	Elapsed time in seconds from last time <b>START</b> was pressed until last error occurred.
KEY 1-5	—	—	—	Record of last five key presses prior to a system error.
PROG	—	—	—	Record of the last program in execution when a system error occurred.
LSTDCK	0	0	65,535	Number of miles (UNITS=English), or km (UNITS=Metric) since the running deck was last serviced or replaced.
LSTBLT	0	0	65,535	Number of miles (UNITS=English), or km (UNITS=Metric) since the running belt was last replaced.
LST MTR	0	0	65,535	Number of miles (UNITS=English), or km (UNITS=Metric) since the motor brushes were last changed.

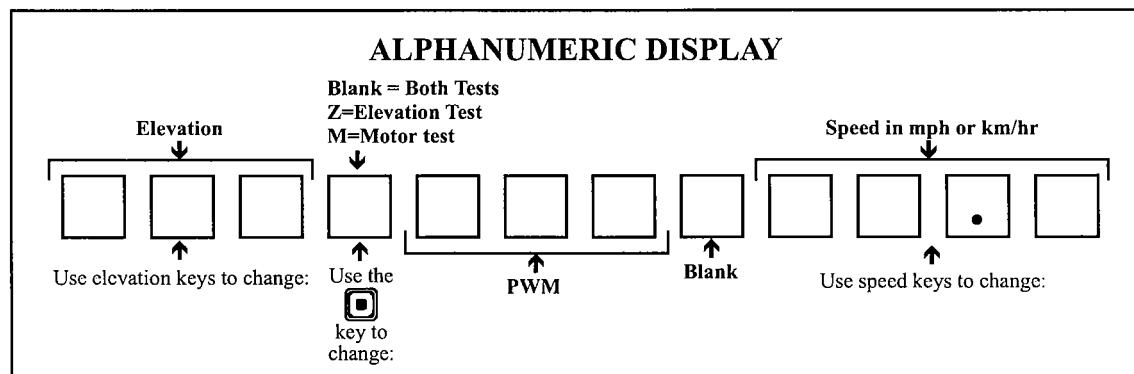
## **MOTOR TEST MODE**

**Motor Test Mode** allows you to calibrate incline and running belt speed, and burn in the motor, by way of the controls and displays of the treadmill. To enter Motor Test Mode:

- Enter Manager Settings (or Maintenance Settings).
  - Press and *hold* **1**, **2**, and **START** together (or **1**, **2**, and **START** together).
  - Release **1** (or **2**).
  - Listen for a beep and see MANAGER SETTINGS (or MAINTENANCE SETTINGS) in the display momentarily.
  - Release the remaining keys. See UNITS in the Alphanumeric Display.
- Press and release **E**.
- See three data items in the Alphanumeric Display. Or...

Alternatively, to enter Motor Test Mode from Operating (normal) Mode:

- Move the ON/OFF switch (main power switch @ the rear of the unit) to OFF.
- Press and hold **E** while moving the ON/OFF switch to ON.
- Release **E**.
- See three data items in the Alphanumeric Display, shown below.



The data items in the Alphanumeric Display are, from left to right:

- Elevation (Incline): Representation of voltage to elevation motor. Multiply by 0.019608 to get actual voltage. Letter Z or M follows numeral data where Z signifies elevation and M signifies motor, and a blank signifies both elevation and motor.
- Pulse-width modulation (PWM) duty cycle. Divide by 512 to get percent duty cycle.
- Speed in mph (UNITS=English) or km/hr (UNITS=Metric).

The following keys are available in Motor Test Mode:



**INCLINE** Keys: Adjust voltage to incline motor to make running deck incline up and down in increments of 1%. Keys will repeat if held.

**DANGER:** Do not adjust the voltage below the lowest allowable ELMAX=25 (0.49 volts) or above the highest allowable ELZERO=242 (4.75 volts), as safety features are turned off in Motor Test Mode, and mechanical damage may ensue.



**SPEED** Keys: Adjust PWM duty cycle to make motor speed go up and down in increments of 0.1 mph (UNITS=English) or 0.1 km/hr (UNITS=Metric).



**Heart Rate Key:** Starts automatic calibration of MIN PWM, 1/2 MAX, and MAX PWM for MIN SPD and MAX SPD range. Calibration lasts less than 3 minutes and will move the running belt. Press **STOP** when running belt has stopped, to save calibration.



**Key:** Starts burn-in (continuous operation of running belt and incline screws) using one of the Program Selections at maximum speed. Press **STOP** to stop burn-in.



**Key:** Exits Motor Test Mode and enters Operating Mode. Stops burn-in.



**Number/Program Select Key:** Selects letter Z or M following Elevation (Incline) data numeral to signify that numeral may be saved as ELZERO or ELMAX, respectively.

To leave Motor Test Mode and enter Operating Mode, press and release **STOP**.

## **DISPLAY TEST MODE**

**Display Test Mode** allows you to test the light-emitting diodes (LEDs), 15-segment displays, and watchdog timer of the Display Control Panel by way of its own controls and displays. It also allows you to see the EPROM version. To enter Display Test Mode:

- Enter Manager Settings (or Maintenance Settings).
  - Press and *hold* **1**, **2**, and **START** together (or **1**, **3**, and **START** together).
  - Release **1** (or **2**).

- Listen for a beep and see MANAGER SETTINGS (or MAINTENANCE SETTINGS) in the display momentarily.
- Release the remaining keys. See UNITS in the Alphanumeric Display.
- Press and release **5**.
- See that all LEDs are lit.
- Press and release **5**.
- See that all LEDs are dark. See the EPROM version, e.g. PWM V3.3, in the Alphanumeric Display. Or...

Alternatively, to enter Display Test Mode from Operating (normal) Mode:

- Move the ON/OFF switch (main power switch @ the rear of the unit) to OFF.
- Press and hold **5** while moving the ON/OFF switch to ON.
- Release **5**.
- See that all LEDs are lit.
- Press and release **5**.
- See that all LEDs are dark. See the EPROM version, e.g. PWM V3.3, in the Alphanumeric Display.

The following keys are available in Display Test Mode:



**INCLINE** Keys: Lights the % Incline indicators and Alphanumeric Display character segments one at a time. Keys will repeat if held.



**Heart Rate Key:** Enters *Heart Rate Test Mode* below.



**Key:** Displays START START in Alphanumeric Display.



**Number/Program Select Keys:** Display 0 through 9, respectively, in each alphanumeric Display character segment.



**Key:** Displays WD TEST in Alphanumeric Display. Activates watchdog timer, which resets the processor and returns the treadmill to Operating Mode. Displays WD FAIL in Alphanumeric Display if watchdog timer fails.

To leave Display Test Mode and enter Operating Mode, press and release **STOP**.

## **HEART RATE TEST MODE**

Heart Rate Test Mode allows you to test the heart rate calculation and display capability of the treadmill if it is equipped with contact rings or Polar wireless heart rate chest strap reception capability. To enter Heart Rate Test Mode:

- Enter Manager Settings (or Maintenance Settings), then Display Test Mode:
  - Press and *hold* **□**, **1**, and **START** together (or **□**, **2**, and **START** together).
  - Release **1** (or **2**).
  - Listen for a beep and see SETTINGS (or CONFIGURE) in the display momentarily.
  - Release the remaining keys. See UNITS in the Alphanumeric Display.
  - Press and release **5**.
  - See that all LEDs are lit.
  - Press and release **5**.
  - See that all LEDs are dark. See the EPROM version, e.g. PWM V3.3, in the Alphanumeric Display.
  - Press any key to obtain a blank display.
  - Press and release **1**.
  - See SEEKING HR in the Alphanumeric Display.
  - Grasp the stainless steel contact rings or place the Polar wireless heart rate chest strap around your chest.
  - See average heart rate in the Alphanumeric Display.

To leave Heart Rate Test Mode and enter Operating Mode, press and release **STOP**.

## TROUBLESHOOTING

### CHAPTER 8

Star Trac recommends that you refer your questions about your **STAR TRAC 4500 TREADMILL** operation and suspected malfunctions to Star Trac's Service Hotline at (800) 503-1221, or USA 1-714-669-1660. However, you may wish to investigate error messages that appear on the Alphanumeric Display. You may do so by reviewing the information in this section.

**KEY DN:** This error generally occurs when a key other than **5**, **E**, or **STOP** is held pressed while the **ON/OFF** switch is moved to **ON**. It may also happen if a key becomes stuck. When you see KEY DN: Move **ON/OFF** switch to **OFF**; wait 2 seconds; move **ON/OFF** switch to **ON**. The treadmill should be operational again. Notify Star Trac if additional assistance is needed.

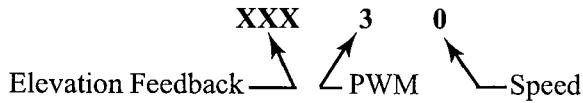
**NO STO:** This error generally occurs when the Stop Switch is not connected tightly to the circuit board of the Display Control Panel. It may also happen if the circuitry associated with the switch develops a fault. When you see NO STO: Move **ON/OFF** switch to **OFF**; wait 2 seconds; move **ON/OFF** switch to **ON**. Notify Star Trac if additional assistance is needed.

**NO RPM and SP CNG:** These errors generally occur when the running belt speed sensor is disconnected, faulty, or misaligned relative to the revolutions-per-minute (RPM) sensor of the motor. They may also happen if the speed sensor cable is damaged or if the Motor Control Board (MCB) is misadjusted or faulty. When you see NO RPM or SP CNG: Move **ON/OFF** switch to **OFF**; wait 2 seconds; turn **ON/OFF** switch to **ON**. Notify Star Trac if additional assistance is needed.

**EL STL, EL RNG, EL LOST and EL NOZ:** These errors generally occur when the elevation (incline) potentiometer is faulty or out of limits, or the elevation motor is disconnected or receiving low power. They may also happen if the Motor Control Board (MCB) is faulty or the motor gears are stripped. They are usually accompanied by failure of the treadmill to rise from an elevation other than maximum (or descend from an elevation other than minimum), with attendant beep indication, when **▲** (or **▼**) is pressed. When you see EL STL, EL RNG, EL LOST, or EL NOZ:

1. Move **ON/OFF** switch to **OFF**; press and hold **E** while moving **ON/OFF** switch to **ON**; release **E**. See *Motor Test Mode*.

2. Check that display shows:



3. Press and release **INCLINE** repeatedly until Elevation Feedback is between 57 and 240.

**Caution:** Do not adjust the voltage below the lowest allowable  $ELMAX=57$  (1.12 volts) or above the highest allowable  $ELZERO=240$  (4.71 volts), as safety features are turned off in Motor Test Mode, and mechanical damage may ensue.

4. Press **STOP** Key. Treadmill may now be operational. Call Star Trac if additional assistance is needed.







**14410 Myford Road • Irvine, California 92606  
Telephone: (714) 669-1660 • Fax: (714) 838-6286**

**P/N 620-1122 Rev. D**

**<http://www.startrac.com>**